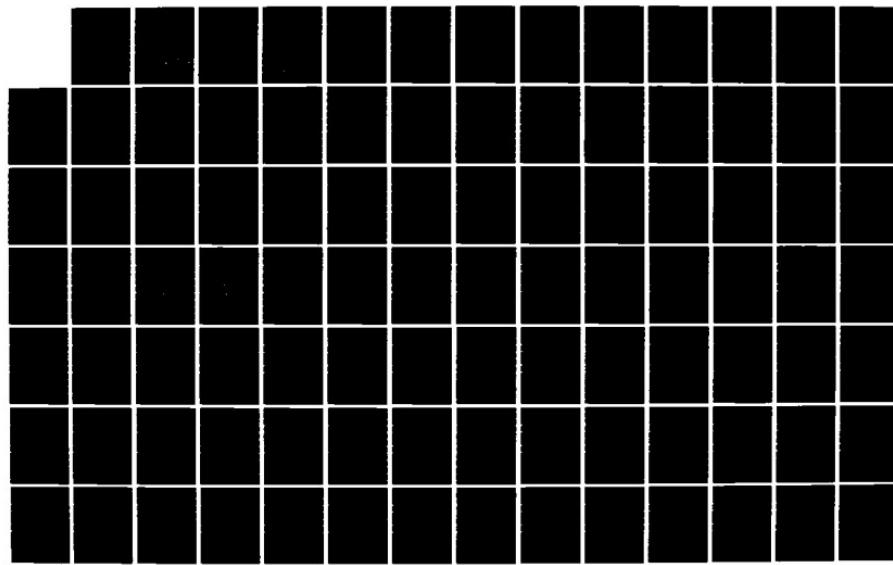


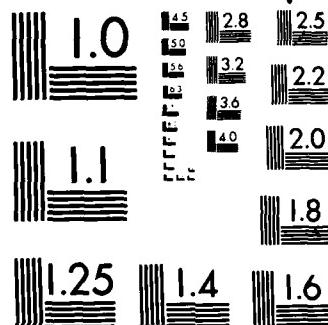
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NRL Memorandum Report 5165

**Data Validation and Summary for the  
NRL Remote Sensing Experiment:  
Phelps Bank, July, 1982**

**Part I: Hydrography**

J. A. C. KAISER

*Ocean Dynamics Branch  
Marine Technology Division*

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September 2, 1983



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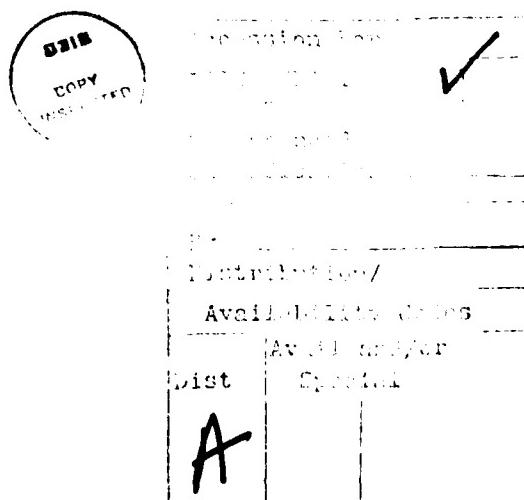
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DATA VALIDATION AND SUMMARY FOR THE  
NRL REMOTE SENSING EXPERIMENT:  
PHELPS BANK, JULY, 1982

Part I: Hydrography

I. INTRODUCTION

For several years, Synthetic Aperture Radar (SAR) images of the sea surface revealed planar signatures which were remarkably similar to the bathymetric contours below the water in depths less than about 30m. Such sea-surface bathymetric signatures were also observed by side-looking airborne radar (SLAR). To address the scientific questions raised by these observations, a multi-institutional program (the Airborne Surveillance Phenomenology Program; ASPP) was established at the Naval Research Laboratory, Washington, DC (The original plans are described in Valenzuela and Chen, 1983.). In July, 1982 as the initial field effort of ASPP, a pilot experiment was conducted southeast of Nantucket Island centered around Asia Rip ( $40^{\circ}50'N$ ,  $60^{\circ}20'W$ ). The experiment was to establish techniques for a comprehensive experiment in 1984, to learn about the oceanographic and meteorological environs of Asia Rip, and to obtain a data set for preliminary analysis.

The Nantucket Shoals area was chosen for the experiment because SAR imagery obtained in this area by SEASAT in 1978 (Beal, et al, 1981; p.22) showed a wealth of bathymetric signatures.

During the pilot experiment, meteorological, radar and wave buoy data were gathered. A hydrographic survey of the area was made with a Neil-Brown conductivity-temperature-depth (CTD) profiler as time permitted. Forty-one casts were obtained supplemented by 29 T-11 expendable bathy-thermograph (XBT) probe drops. The data was confined to the tessera

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40°30' to 41°10'N and 68°55' to 69°45'W. The data was obtained in two segments: 11 to 14 and 17 to 21 July, 1982. This report summarizes the hydrographic situation in the operational area during the experiment based primarily on the CTD data. The data has been corrected for temporal changes during the survey period and adjusted for tidal displacements. In appendices, the CTD and XBT casts are plotted and average CTD data in 1 meter bins are tabulated.

## II. INSTRUMENTATION

The hydrographic situation at Nantucket Shoals was primarily derived from casts made with a conductivity-temperature-depth (CTD) profiling instrument. Expendable bathythermograph (XBT) probes were also dropped to obtain additional temperature profiles.

### A. CTD Instrument

The CTD was manufactured by Neil Brown Instrument Systems and is very similar to their Mark III instrument. The instrument measures each channel of data at a 31 Hertz rate. The electrical conductivity of the water is determined by a four-electrode cell 3 cm long. The temperature is measured by both a platinum resistance element (time constant .5sec) and a thermistor with a time constant of about .05sec. The analog signal from each temperature sensor is combined so that the platinum element provides long term stability and accuracy and the thermistor provides fast response. The pressure is read by a strain gauge sensor. The conductivity, temperature and pressure signals are digitized by three separate 16-bit-plus-sign digitizers and mixed into a digital data stream. The digital data is then transmitted up the hydrowire in frequency-shifted-key (FSK) format using 5 and 10 Hz frequencies. This FSK data stream is converted to TTY-compatible digital data to provide a serial data stream. It is also unmixed and converted to TTY-compatible format to provide a parallel digital data stream and it is digital-to-analog converted to provide parallel analog signals. (Brown and Morrison, 1978, provide details of the CTD instrument).

The serial digital data is logged on an HP-1000 computer through the general purpose interface bus onto 800 bpi 9-track tape. The

serial FSK data is also recorded on a high quality audio recorder (7.5 ips) to provide backup recording. The parallel analog signals are plotted on a 2-channel X-Y-Y' recorder to provide real time monitoring.

The inaccuracies, resolution, and total noise of the CTD channels are in Table 2.1. The inaccuracies are based on the calibration history of the instrument. The system noise is the white noise floor of each channel and the resolution is the digital least count. An evaluation of the CTD characteristics will be found in Kaiser and Clamons, 1983. The instrument used in this experiment is referred to as CTD-II in that report.

#### B. XBT Instrument

The XBT probes used for this experiment were standard Sippican Corporation (Marion, Mass.) type T-11 fine structure XBT's. These probes have a nominal accuracy and resolution of  $0.1^{\circ}\text{C}$ . The probes free fall in the water, and knowing the fall rate equation, their depth-time dependence can be determined. The average fall rate for T-11 probes is 1.75 m/sec. Their nominal depth accuracy is 2%.

Normally the XBT data are recorded on an HP-1000 computer using a digital multimeter. Some were, but computer malfunction required the post cruise manual digitization of the XBT charts on a digitizing table. This does not significantly change the accuracy and resolution of the final digital XBT data.

Table 2.1. CTD System Characteristics

<u>Channel</u>	<u>Resolution</u>	<u>Inaccuracy</u>	<u>System Noise</u>
Temperature, °C	.0005	.005	.0002
Conductivity, mmho/cm	.001	.005	.0004
Pressure, dbar	.025	1.6(.2)*	.02

\*This is over the total range of 1600 dbar. With zero correction, over the 0-100 dbar range the inaccuracy is .2 dbar.

### C. Navigation

The primary navigation aid was two Northstar 7000 Loran-C systems. These have a nominal accuracy of 0.1 km in the Nantucket Shoals area due to the excellent Loran coverage there. The time delays and calculated latitude and longitude information from the Loran-C sets were logged on an HP-1000 computer and updated every minute. The complete time series of navigation for this experiment will be found in Kaiser and Munch, 1983. The position for each cast was determined at the time the CTD or XBT entered the water. In most cases the CTD casts were less than 600 sec in duration and the XBT drops required less than 50 sec.

### III. DATABASE

The data base used here consists of 41 CTD casts and 29 XBT profiles. The geographical distribution of these are shown in Fig. 3.1 with the lowering or drop number. The CTD and XBT logs are in Tables 3.1 and 3.2 respectively.

The CTD cast depths and water depths are in Table 3.1. For most of the casts we tried to keep the CTD about 5 m above the bottom, but this varies; we did not have a bottom finder on the CTD. The actual bottom depths were determined from a Raytheon precision depth recorder.

CTD lowerings 7-13 and 27-34 were recorded on audio tape but inadvertently the tapes were erased. Since the casts were also plotted on an analog recorder, the analog traces were hand digitized on a digitizing table.

XBT drops 14-23 were to determine the existance of a weak east-west front. XBT drops 24-32 were to resurvey the same front about 1/2 tidal cycle later.

To convert from Julian day to calendar day, the following correspondence applies: JD 192 is July 11; JD 198 is July 17; and JD 202 is July 21.

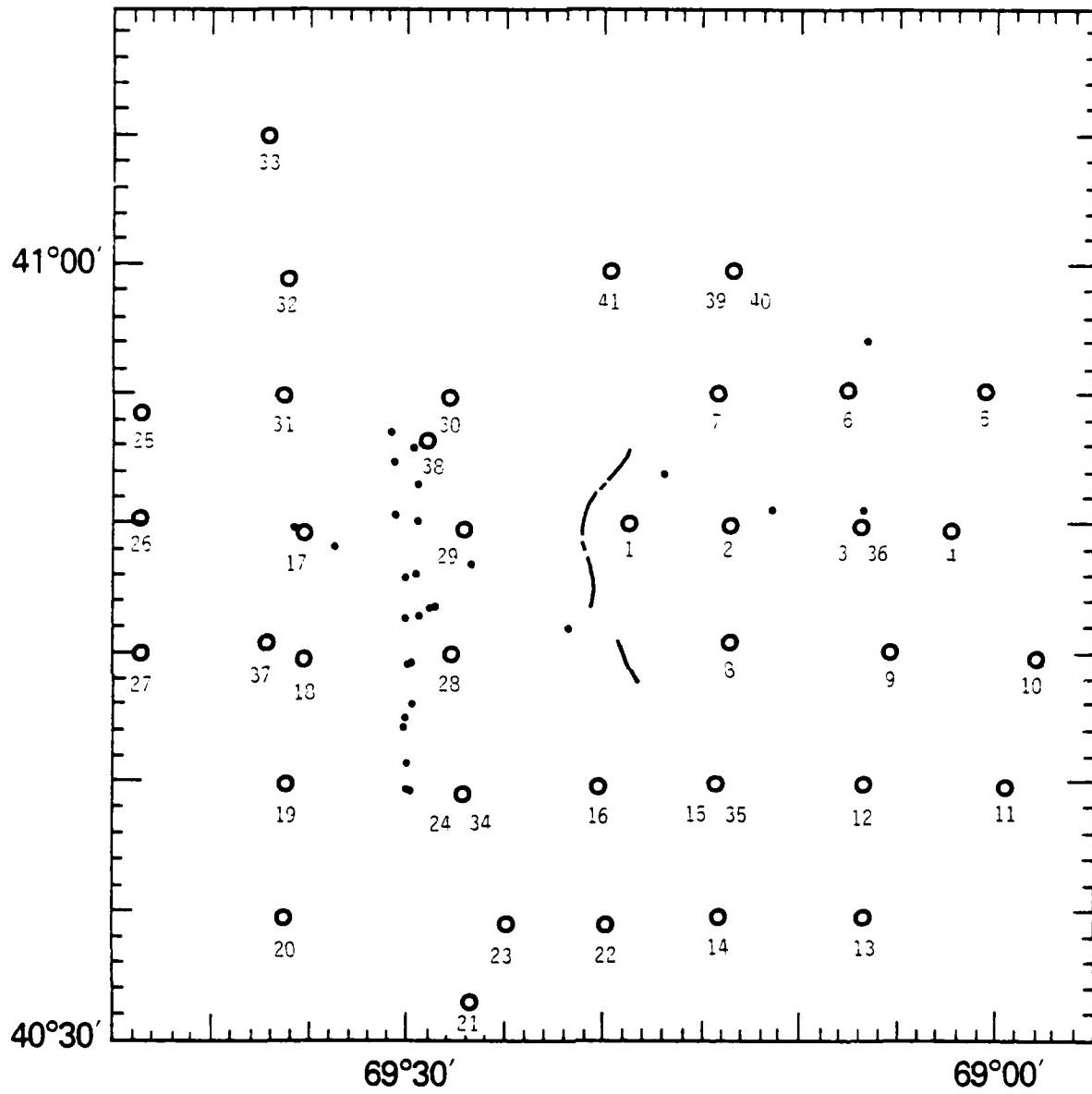


Fig. 3.1. Location of CTD casts (0) and XBT drops (●) with their identifiers. The 20 m isobath is included.

TABLE 3.1. CTD CASTS

DAY-TIME GMT	LOW #	LATITUDE N	LONGITUDE W	CAST DEPTH	WATER DEPTH M	HAND DIGITIZED
192-2329	1	40°49.22'	69°17.77'	51	55	
193-0021	2	40°49.84'	69°13.31'	55	61	
193-0104	3	40°49.85'	69°07.09'	66	65	
193-0143	4	40°49.81'	69°02.19'	80	84	
193-0250	5	40°54.88'	69° 1.15'	79	80	
193-0314	6	40°55.01'	69° 8.00'	68	74	
193-0348	7*	40°54.96'	69°14.01'	62	65	X
193-2212	8	40°44.56'	69°13.32'	51	61	X
193-2257	9	40°44.71'	69° 5.17'	69	71	X
193-2339	10	40°44.90'	68°58.15'	62	72	X
194-0017	11	40°40.23'	68°59.52'	62	66	X
194-0101	12	40°39.84'	69°06.64'	63	78	X
194-0139	13	40°35.16'	69°06.79'	77	80	X
194-0222	14	40°34.96'	69°13.95'	56	60	
194-0303	15	40°39.66'	69°13.93'	54	58	
194-0343	16	40°40.06'	69°19.90'	49	55	
194-2218	17	40°50.04'	69°35.04'	35	39	
194-2256	18	40°45.24'	69°35.86'	40	45	
194-2333	19	40°40.25'	69°36.09'	45	50	
195-0011	20	40°35.16'	69°36.16'	59	62	
195-0112	21	40°32.04'	69°27.20'	55	59	
195-0204	22	40°34.79'	69°20.06'	55	60	
195-0246	23	40°34.85'	69°26.53'	49	54	
195-0330	24	40°39.58'	69°26.71'	50	55	
198-0739	25	40°54.29'	69°42.95'	28	32	
198-0815	26	40°50.26'	69°43.05'	35	38	
198-0853	27	40°45.13'	69°42.95'	39	42	X
198-1000	28	40°45.06'	69°27.35'	48	50	X
198-1031	29	40°49.87'	69°27.26'	47	50	X
198-1101	30	40°54.87'	69°27.27'	22	26	X
198-1156	31	40°55.12'	69°35.73'	38	40	X
198-1228	32	40°59.88'	69°35.77'	38	43	X
198-1302	33	41°04.92'	69°35.96'	21	31	X
198-1957	34	40°39.99'	69°27.12'	53	55	X
198-2157	35	40°40.44'	69°12.92'	62	66	

TABLE 3.1. CTD CASTS (Cont)

DAY-TIME GMT	LOW #	LATITUDE N	LONGITUDE W	CAST DEPTH	WATER DEPTH M	HAND DIGITIZED
200-1410	36	40°50.30'	69°07.16'	69	73	
200-2235	37	40°45.42'	69°36.15'	36	40	
200-2351	38	40°53.10'	69°20.96'	36	45	
201-1630	39	40°59.29'	69°13.49'	31	70	
201-1645	40	40°59.14'	69°13.19'	67	69	
	41	41°00.15'	69°19.58'	47	49	

\*Lowering 7 was machine digitized to 44 m and hand digitized to 61 m

TABLE 3.2. XBT DROPS

DAY-TIME GMT	DROP NO	LATITUDE N	LONGITUDE W	WATER DEPTH M	
191-0946	7	40°48.50'	69°26.81'	-	
191-1022	8	40°47.00'	69°29.00'	-	
192-1215	9	40°46.96'	69°29.04'	-	
192-1845	10	40°49.96'	69°18.94'	-	
193-1935	11	40°52.00'	69°16.79'	53	
194-1820	12	40°49.92'	69°34.64'	35	Questionable
195-1515	13	40°47.42'	69°21.73'	33	
198-1730	14	40°53.71'	69°30.91'	37	Front transect No. 1
198-1745	15	40°52.5'	69°30.60'	37	Front transect No. 1
198-1800	17	40°50.5'	69°30.19'	37	Front transect No. 1
198-1815	18	40°48.1'	69°30.02'	44	Front transect No. 1
198-1830	19	40°46.5'	69°29.95'	44	Front transect No. 1
198-1845	20	40°44.8'	69°29.93'	44	Front transect No. 1
198-1900	21	40°42.8'	69°30.00'	48	Front transect No. 1
198-1915	22	40°41.0'	69°29.96'	48	Front transect No. 1
198-1930	23	40°40.0'	69°29.92'	48	Front transect No. 1
198-2355	24	40°39.7'	69°29.8'	43	Front transect No. 2
199-0010	25	40°42.4'	69°29.8'	48	Front transect No. 2
199-0025	26	40°43.3'	69°29.8'	44	Front transect No. 2
199-0035	27	40°44.9'	69°29.8'	46	Front transect No. 2
199-0050	28	40°46.6'	69°29.6'	45	Front transect No. 2
199-0105	29	40°48.3'	69°29.4'	43	Front transect No. 2
199-0120	30	40°50.14'	69°29.4'	45	Front transect No. 2
199-0135	31	40°51.9'	69°29.4'	38	Front transect No. 2
199-0145	32	40°53.0'	69°29.5'	34	Front transect No. 2
199-2025	33	40°50.7'	69°07.6'	70	
200-0305	34	40°57.1'	69° 6.6'	75	
200-1200	35	40°50.5'	69°11.2'	70	
202-1800	36	40°49.1'	69°33.7'	40	

#### IV. DATA PROCESSING

##### A. CTD Data

The CTD data was transcribed from audio tape to 9-track 800 bpi tape by an HP-1000 computer. 31 data scans/second were logged. These data were digitally processed before plotting or other processing. The data was scanned and, starting at a minimum pressure (0 dbar), all data scans were discarded if  $(p_{n+1} - p_n) < 0$ , where n is the data scan number and p the pressure. Then the data was wild point edited. All data scans in which  $p_{n+1} - p_n > K_1$  were discarded. Then all data points which had

$$|(T_{n+1} - T_n)/(p_{n+1} - p_n)| > K_2$$

$$|(C_{n+1} - C_n)/(p_{n+1} - p_n)| > K_3$$

were discarded. The  $K_1 - K_3$  are chosen for a particular data set. They represent, respectively, the maximum allowable time derivative of pressure, the pressure derivative of temperature, and the pressure derivative of conductivity. For this data we chose  $K_1 = .2$  dbar/scan,  $K_2 = 3.^\circ\text{C}/\text{dbar}$  and  $K_3 = 2.$  mmho/cm-dbar. These values are small enough so that data at the bottom of a mixed layer will not be discarded.

Density and salinity were then calculated from the edited data. No attempt was made to smooth or lag the temperature vis-a-vis the conductivity to prevent "spiking". The density and salinity algorithms are documented in Rosenblum (1980). The algorithms are based on those of the Woods Hole Oceanographic Institution.

### B. XBT Data

The XBT data were all hand digitized from the standard XBT charts and converted to temperature and depth using the standard Sippican conversions. The data was digitized by measuring the coordinates of significant points. These are points which can be connected linearly and in so doing the reconstructed profile is within .1°C from the original curve. The digitized data is then reconstructed by linearly interpolating between successive significant points.

### C. Tidal Adjustment of Data

The hydrographic data were obtained throughout the experimental period and at random phases of the tidal cycle, which is semi-diurnal in the area.

Actual tidal ellipses were determined with drifters at 6 and 19 m west and east of Phelps Bank ( $69^{\circ}20'W$ ) (see Greenewalt and Gordon, 1982). Each tidal ellipse, determined from their measurements and referenced to the maximum flood current at Pollack Rip is plotted in Fig. 4.1. The maximum excursion due to the tides was 6.5 n.mi., while the nominal grid point spacing in the hydrographic survey was 5 n.mi. To accurately plot maps, the lowering locations were all adjusted to a "reference" location in the tidal cycle. It was decided to use the center of the ellipse even though the tidal motion would never bring the water to that point; any point on the ellipse represents an extreme location. The adjustment to each of the 41 lowerings is shown in Fig. 4.2. The points being geographic locations and the circles the adjusted locations.

These tidal corrections were only made to the upper 30 m of the water column. Deeper water most certainly moves in different trajectories

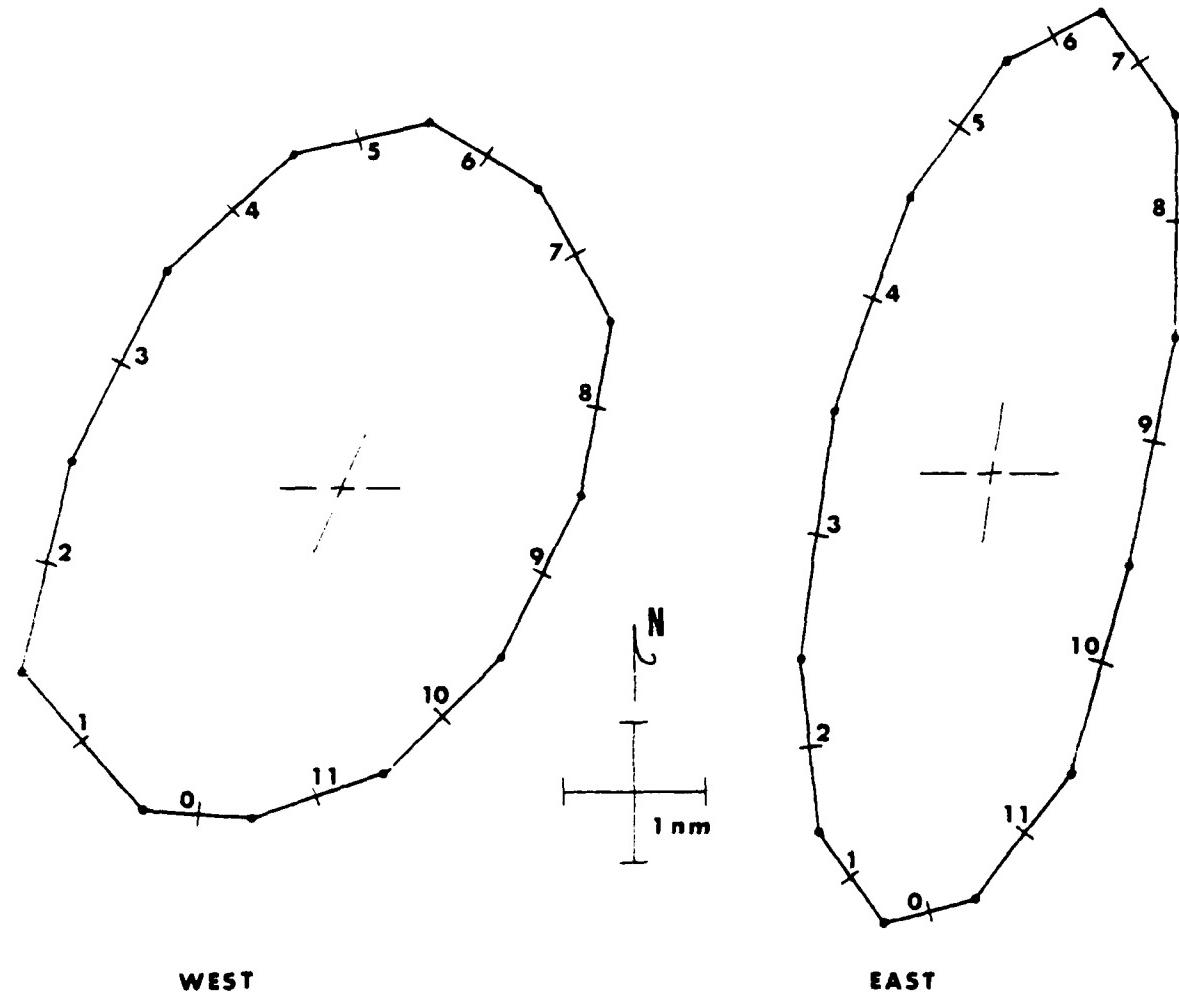


Fig. 4.1. Tidal ellipses west and east of Phelps Bank constructed from the data of Greenewalt and Gordon (1982). The points labelled "0" refer to the maximum flood current at Pollock Rip.

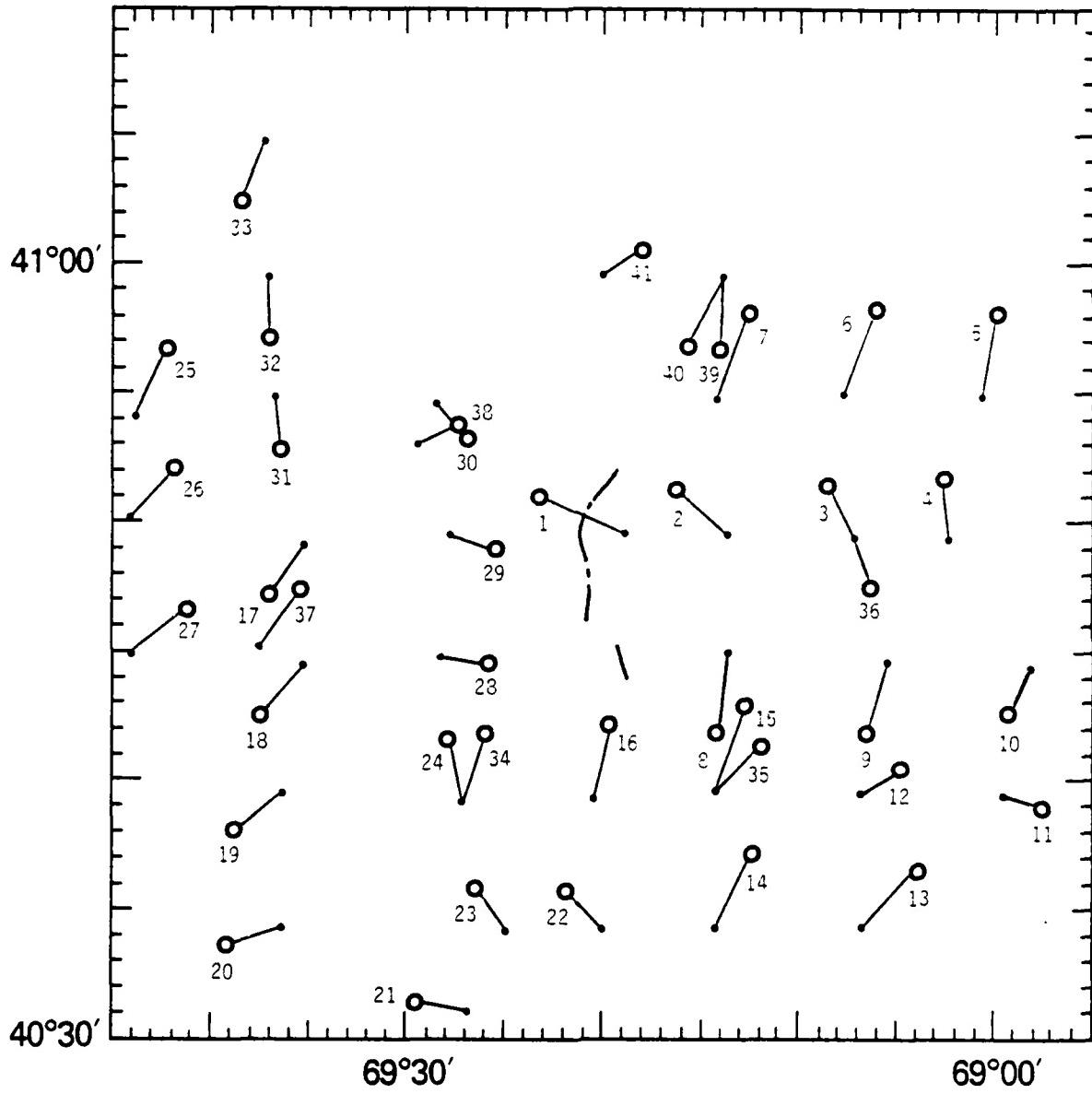


Fig. 4.2. Adjustment to the location of CTD lowerings due to tidal motion. The circle is the adjusted location; the point the geographic location.

due to bathymetric influences. Bottom water probably is almost completely uncoupled from the upper tidal motion.

D. Temporal Adjustment of Data:

The hydrographic survey was carried out over a time span of 9 days. A few lowerings were reoccupied during the period and they indicate a definite temporal trend in the deep (below 30 m) water. Above 30 m no trend could be discerned. The trends were obtained by comparing lowerings 3 to 36, 15 to 35, and 24 to 34. These trends are plotted in Fig. 4.3. The temperature trend is most definite; salinity has a weaker trend and sigma-T no trend. The temperature and salinity corrections are  $-.097^{\circ}\text{C}/\text{day}$  and  $-.04^{\circ}/\text{‰}/\text{day}$  with no correction is made at 198/0600Z. These temporal corrections are only applied at or below 30 m depth.

E. Summary of Corrections:

Both tidal and temporal corrections have been made to the data. The corrections are summarized in Table 4.1.

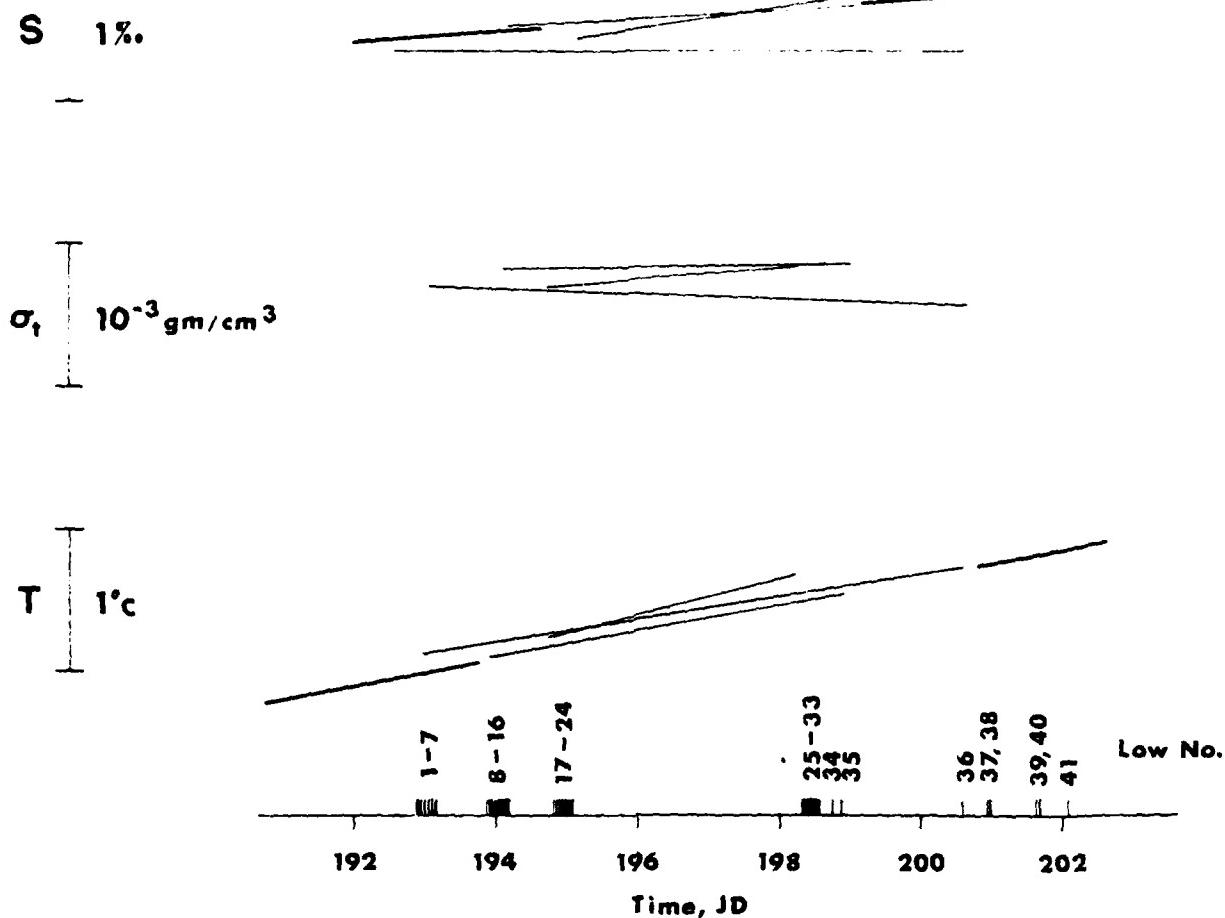


Fig. 4.3. Temporal trends in the salinity, sigma-T and temperature based on reoccupied stations.

TABLE 4.1. CORRECTIONS TO DATA

( $T_i$  - Tidal,  $T_e$  - Temporal)

DEPTH	VARIABLE		
	Temperature	Salinity	Sigma-T
0, m	$T_i$	$T_i$	$T_i$
10, m	$T_i$	$T_i$	$T_i$
20, m	$T_i$	$T_i$	$T_i$
30, m	$T_i, T_e$	$T_i, T_e$	$T_i$
40, m	$T_e$	$T_e$	--
60, m	$T_e$	$T_e$	--
Bottom	$T_e$	$T_e$	--

## V. HYDROGRAPHIC DATA

The hydrographic fields, corrected as described in IV, is mapped at 0, 10, 20, 30, 40, 60 m depths and at the bottom. Temperature, salinity and sigma-T maps have been constructed at each depth (Figs. 5.1 through 5.21). The location of Phelps Bank and Asia Rip are shown as the broken line near  $69^{\circ}20'W$ . The appropriate isobath is plotted on the 10 m to 60 m charts. This isobath was taken from the Department of Commerce 1:400,000, Georges Bank and Nantucket Shoals chart, July, 1980. The bottom data was from the deepest portion of the lowering, usually within 5 m of the bottom (see Table 3.1). A T-S diagram for each cast was plotted (Appendix A) and then all were combined, Fig. 5.22a. The composite T-S diagram suggests six distinct water masses can be identified. These are delineated in Fig. 5.22b. Note that types A, E and F represent surface water. Types B, C, and D are deep water with type C probably resulting from mixing of types B and D. The locations of these watermass types are shown in Fig. 5.23 and Fig. 5.24. Type C occurs over the shallower water in and around Phelps Bank, a result of tidal mixing across the bank.

Selected temperature profiles from the area are geographically positioned in Fig. 5.25. The regions of surface warming are evident, but mixing between types B, C, D are only evident on the salinity profiles, which are on Fig. 5.26.

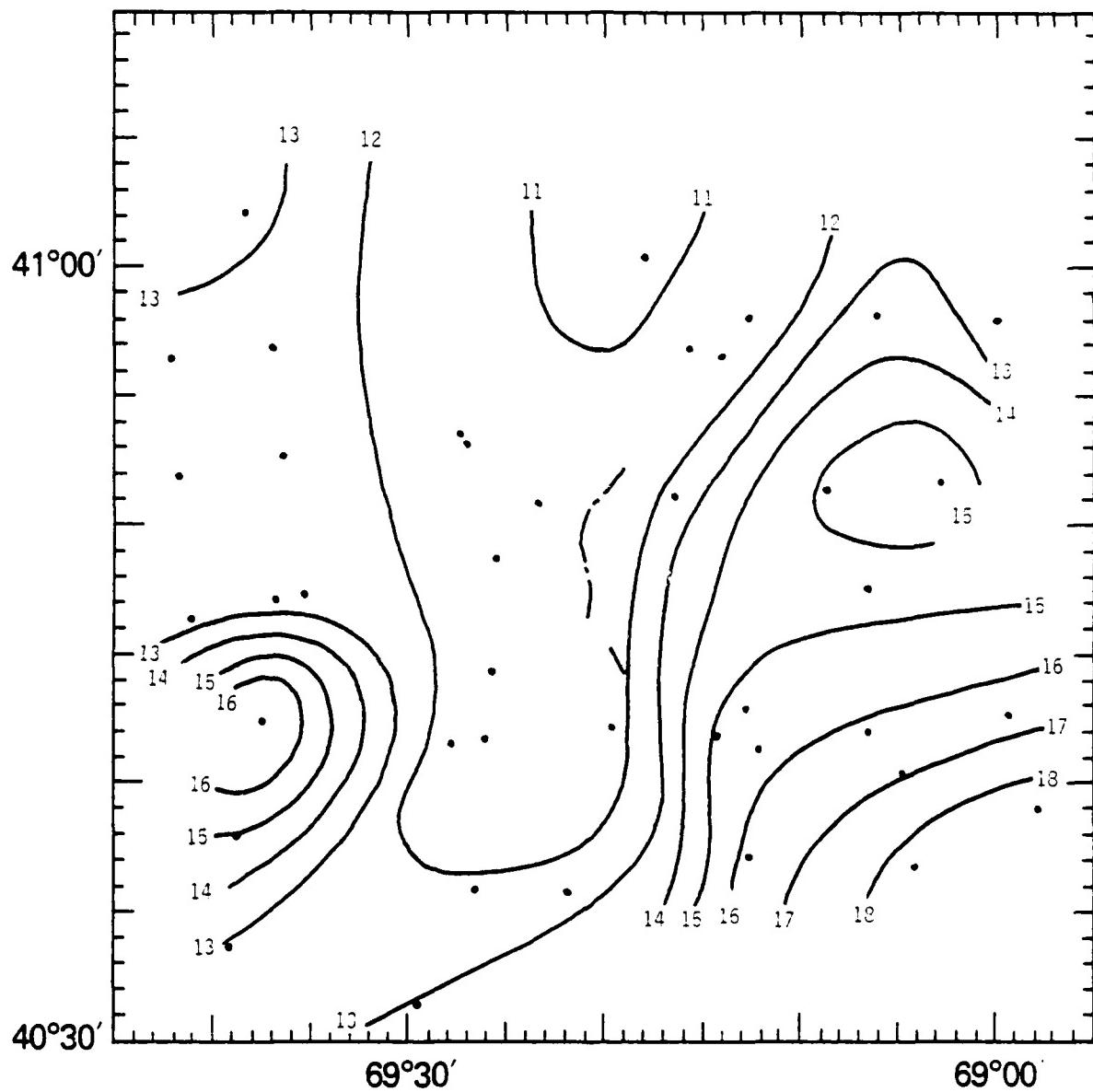


Fig. 5.1. Temperature field at 0 m tidally adjusted.

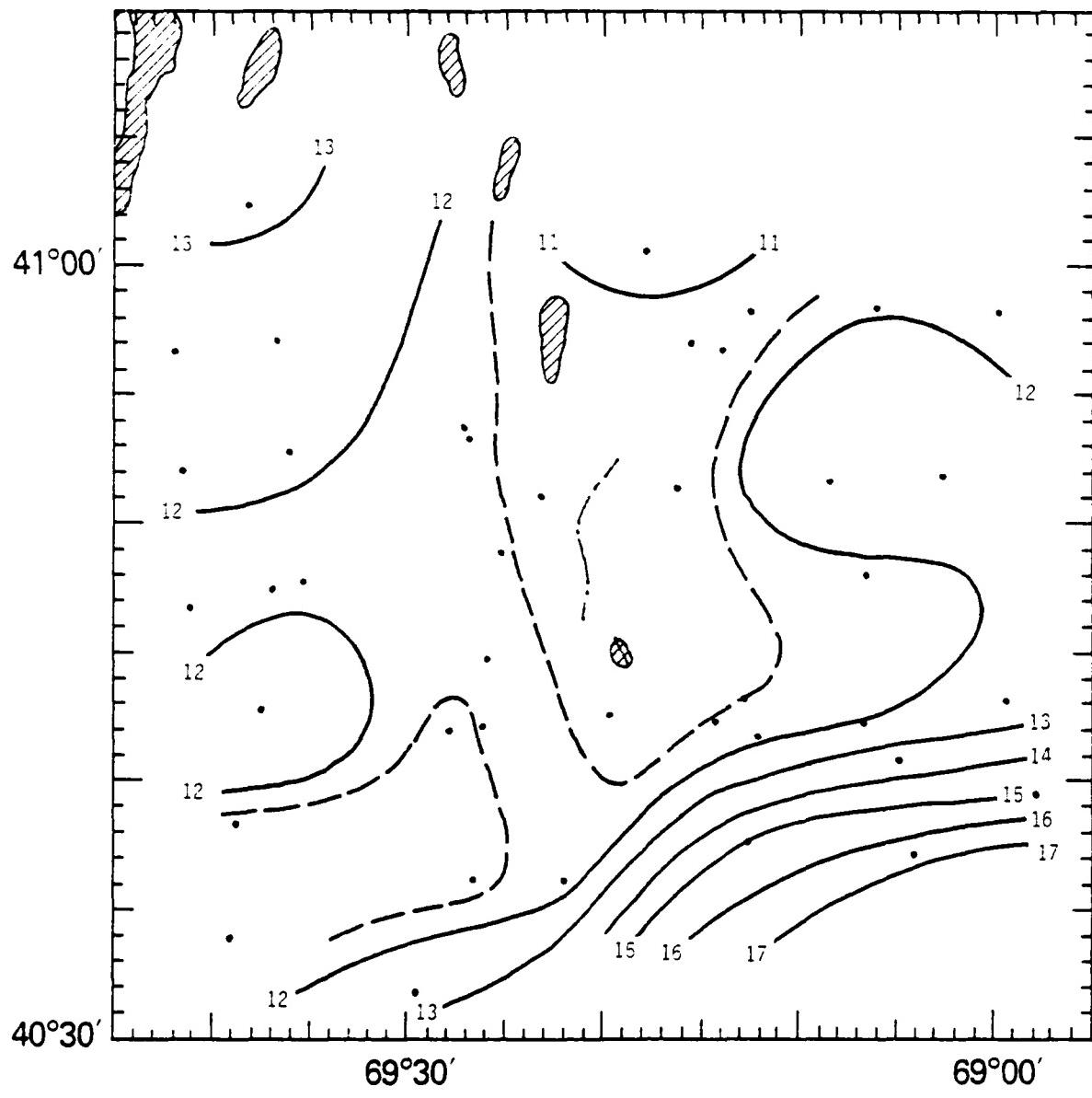


Fig. 5.2. Temperature field at 10 m tidally adjusted.

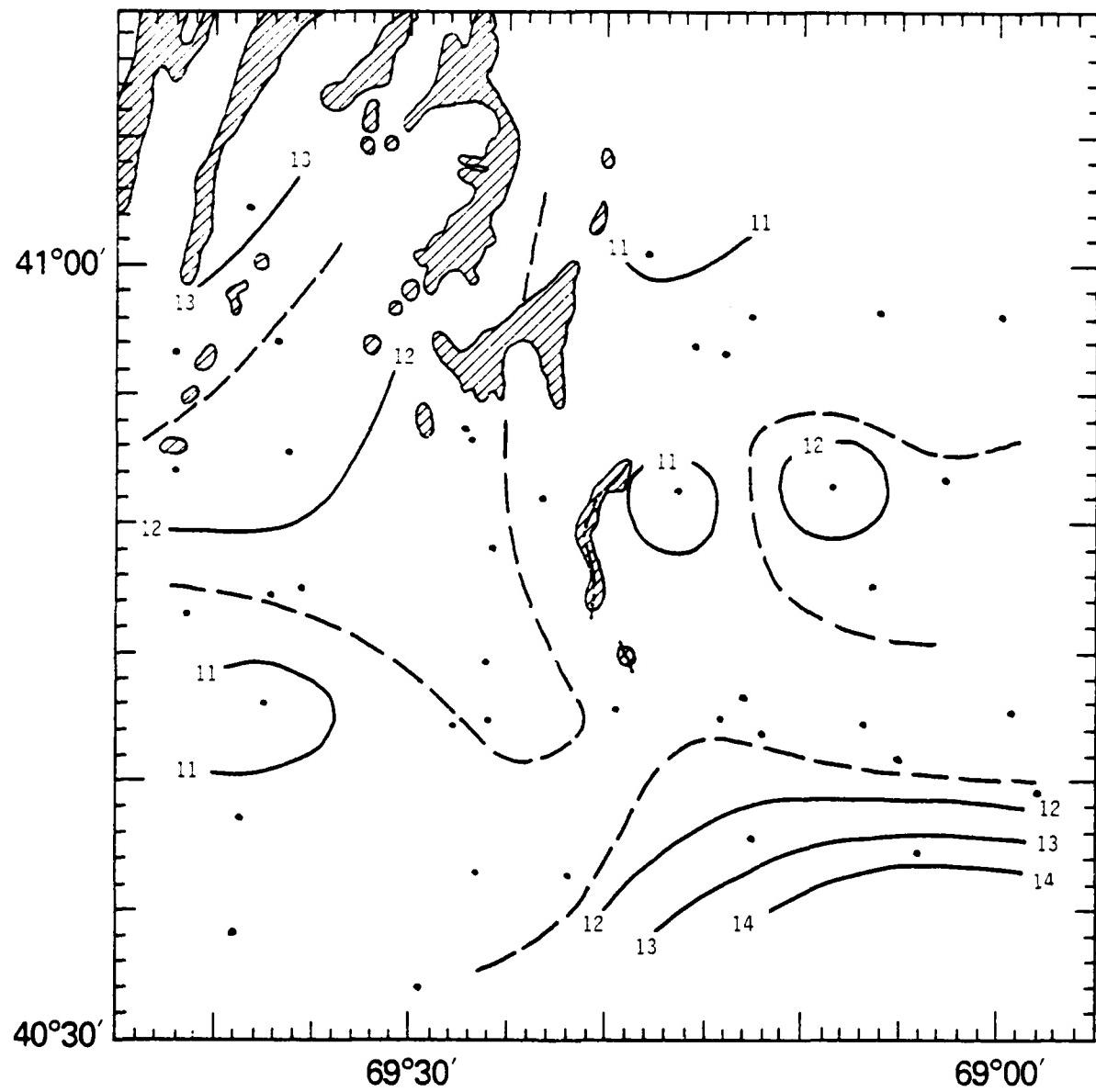


Fig. 5.3. Temperature field at 20 m tidally adjusted.

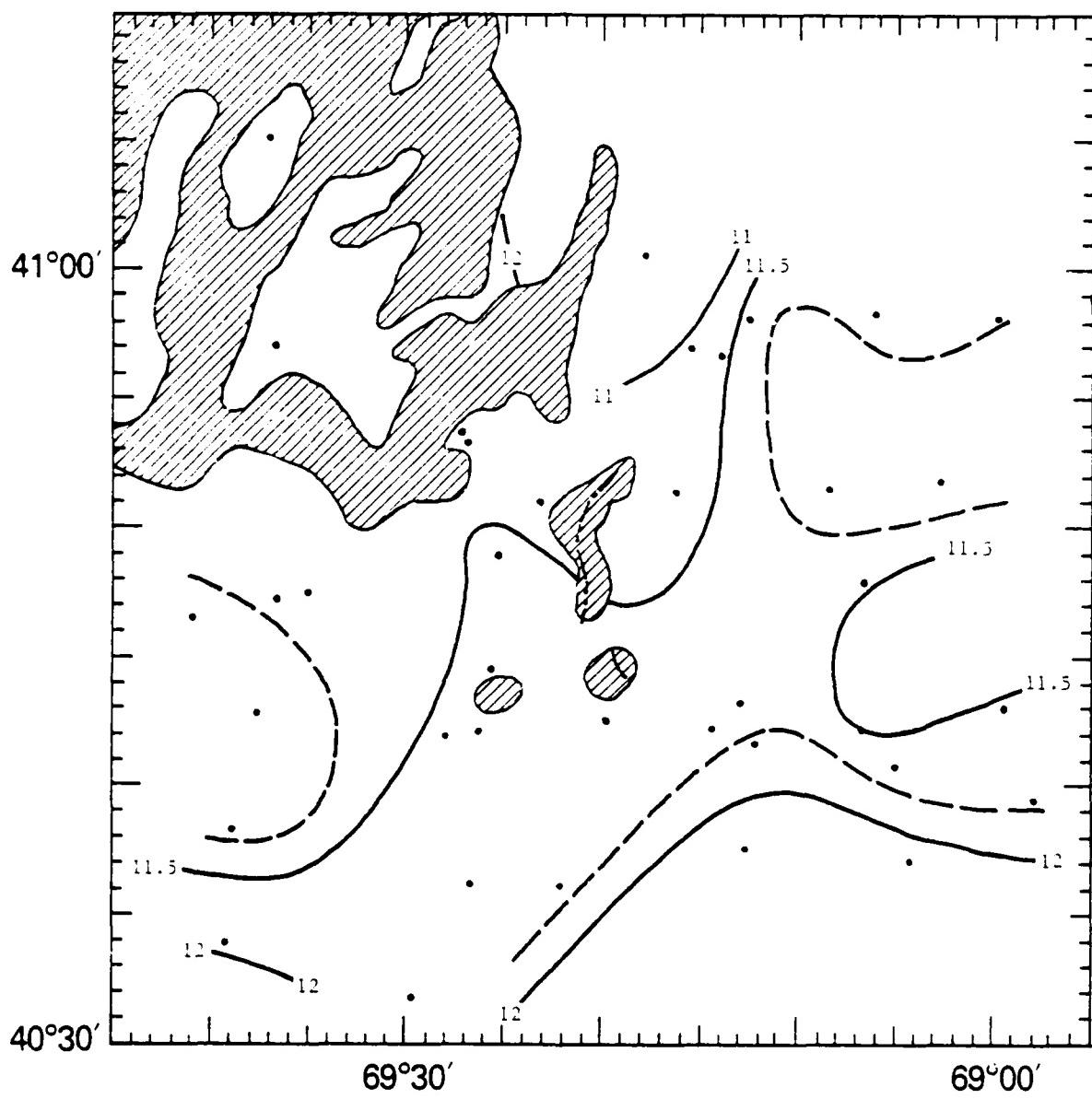


Fig. 5.4. Temperature field at 30 m temporally and tidally adjusted.

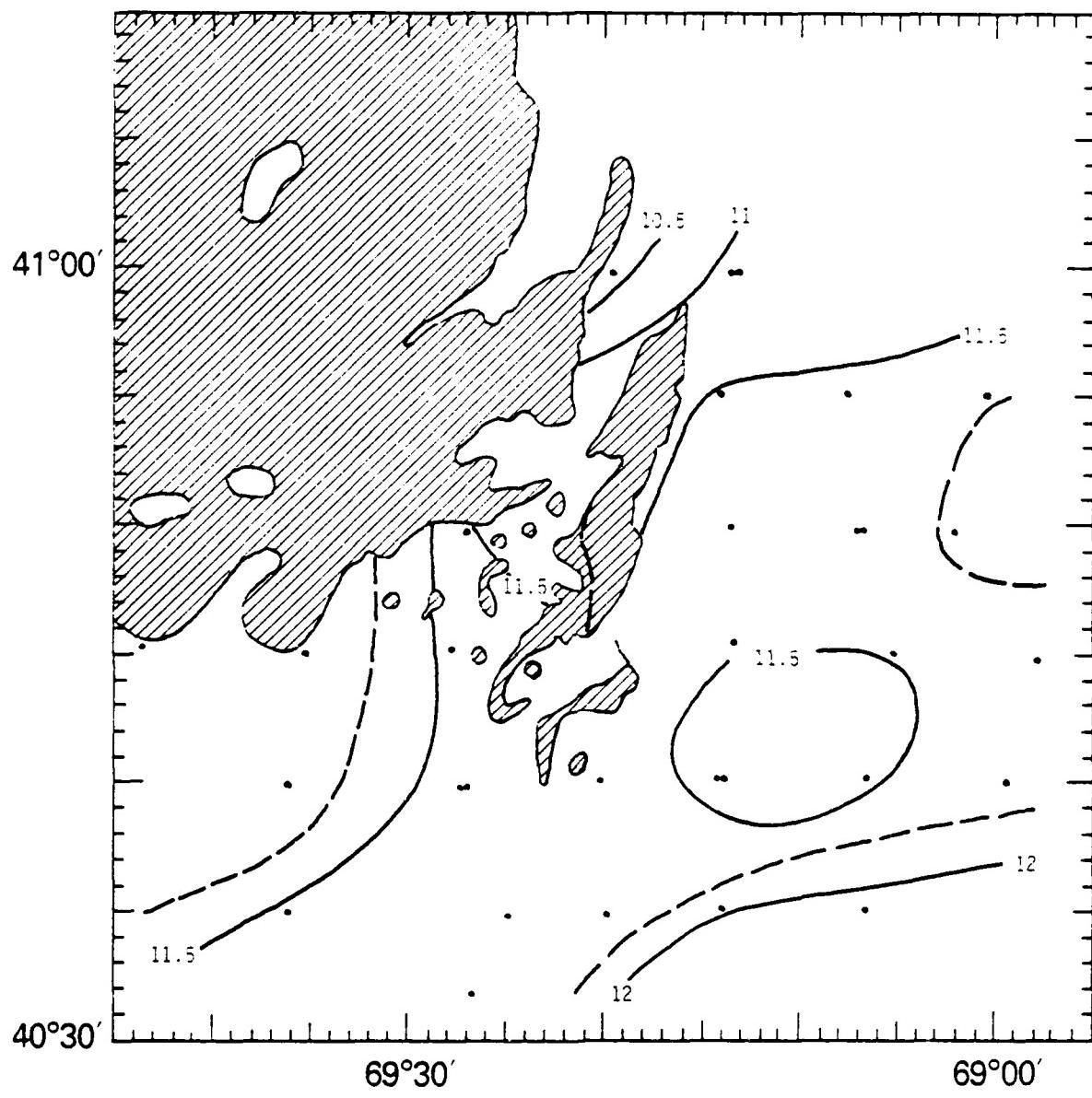


Fig. 5.5. Temperature field at 40 m temporally adjusted.

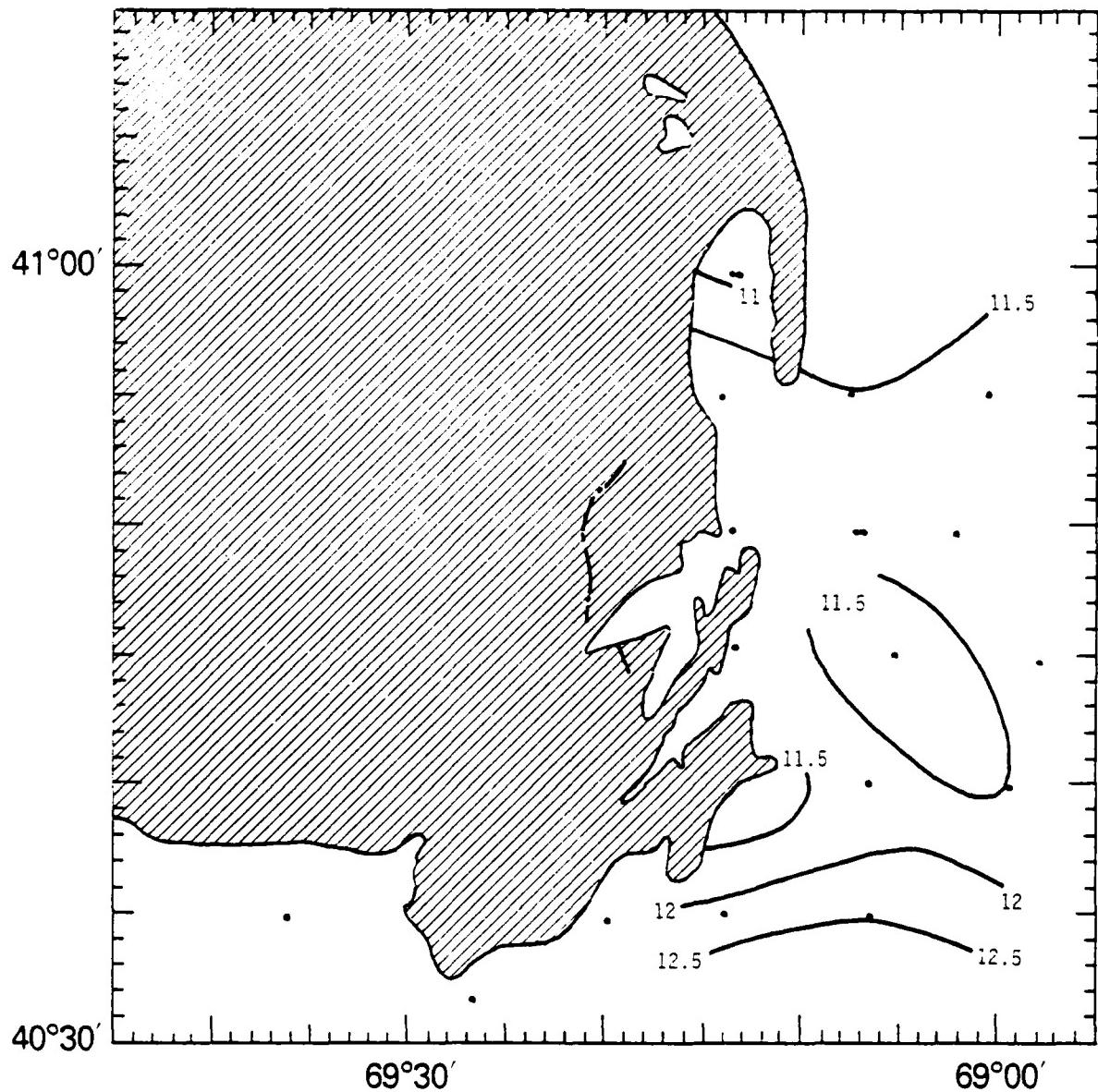


Fig. 5.6. Temperature field at 60 m temporally adjusted.

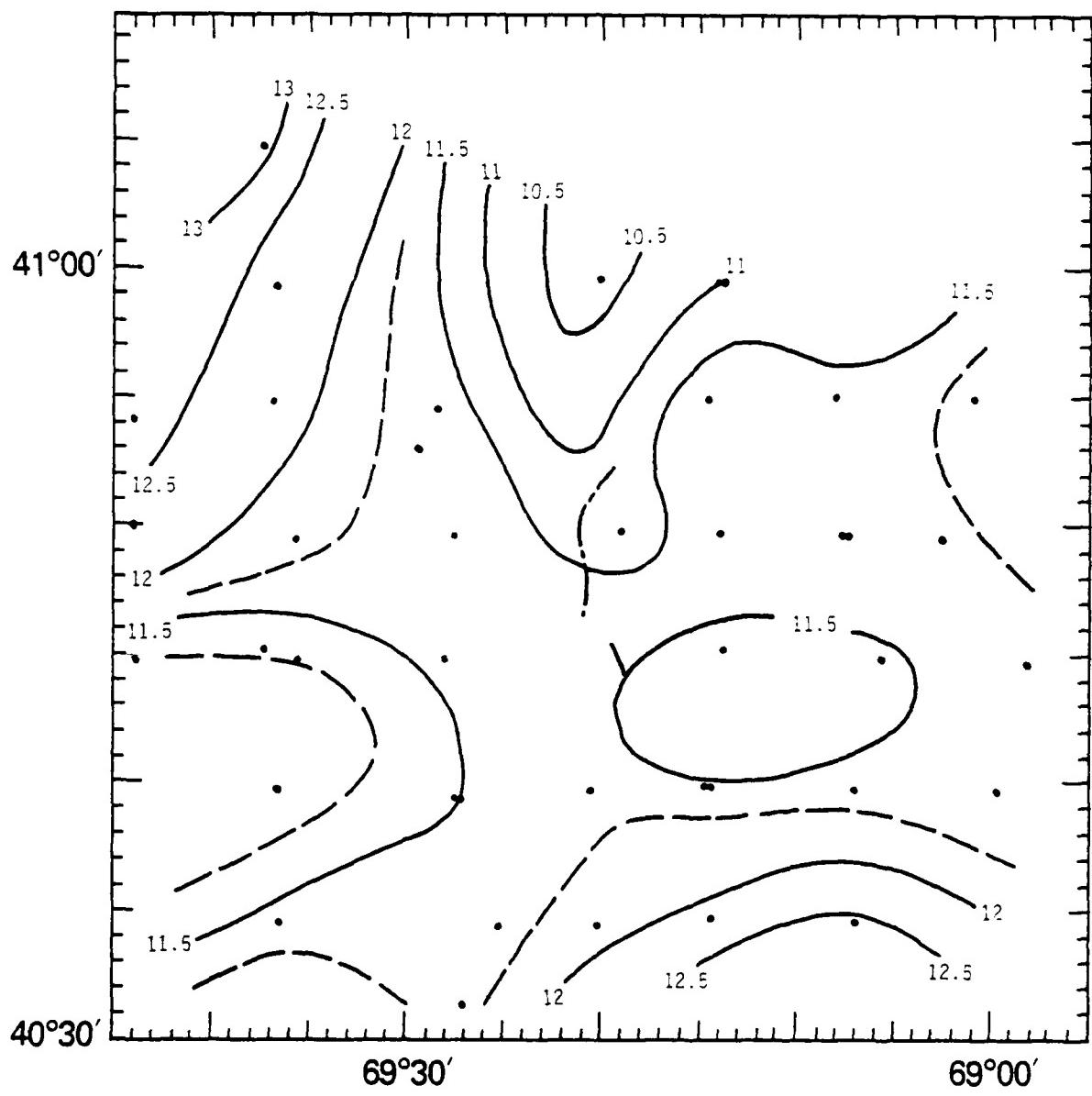


Fig. 5.7. Temperature field at the bottom temporally adjusted.

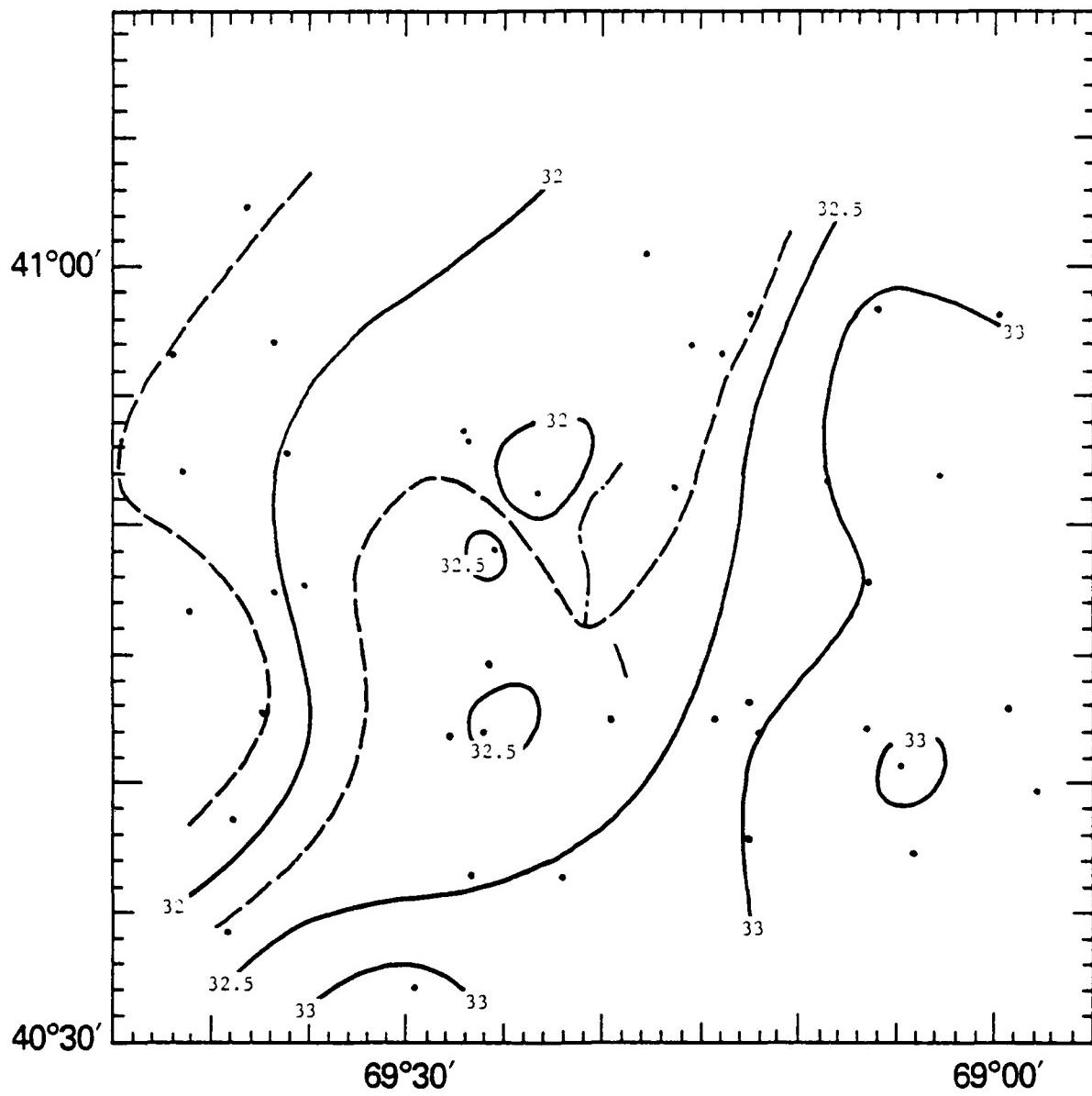


Fig. 5.8. Salinity field at 0 m tidally adjusted.

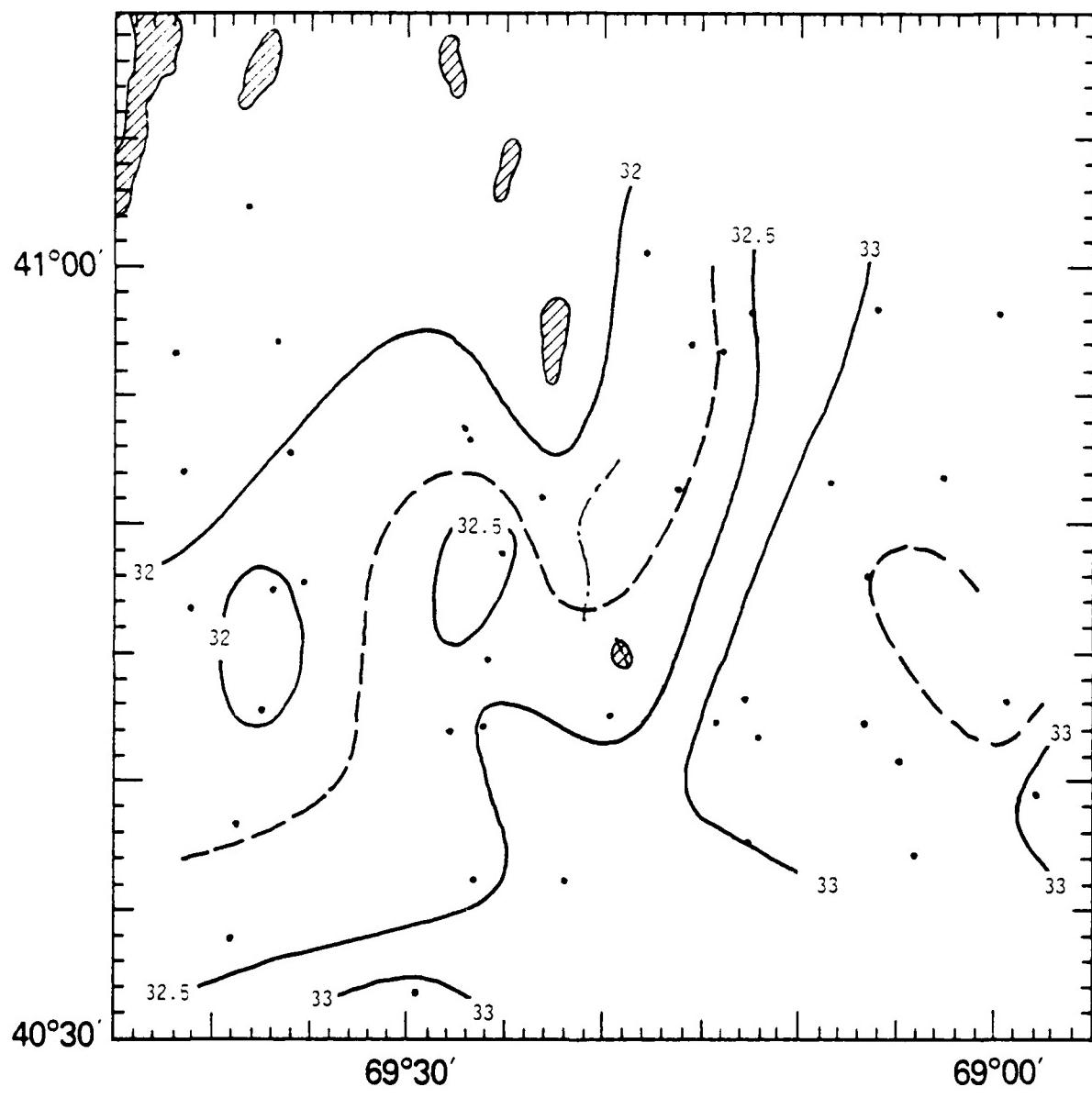


Fig. 5.9. Salinity field at 10 m tidally adjusted.

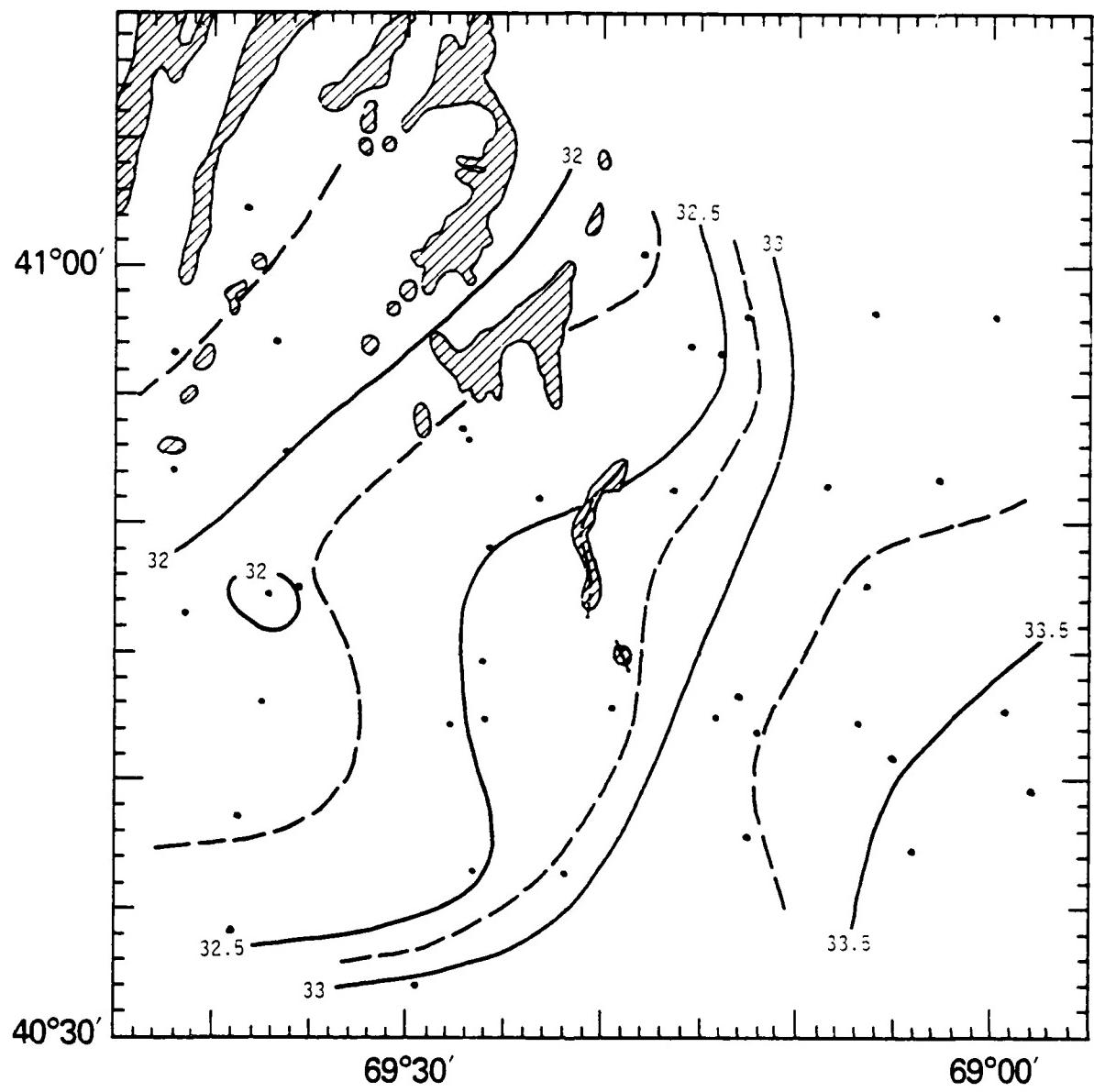


Fig. 5.10. Salinity field at 20 m tidally adjusted.

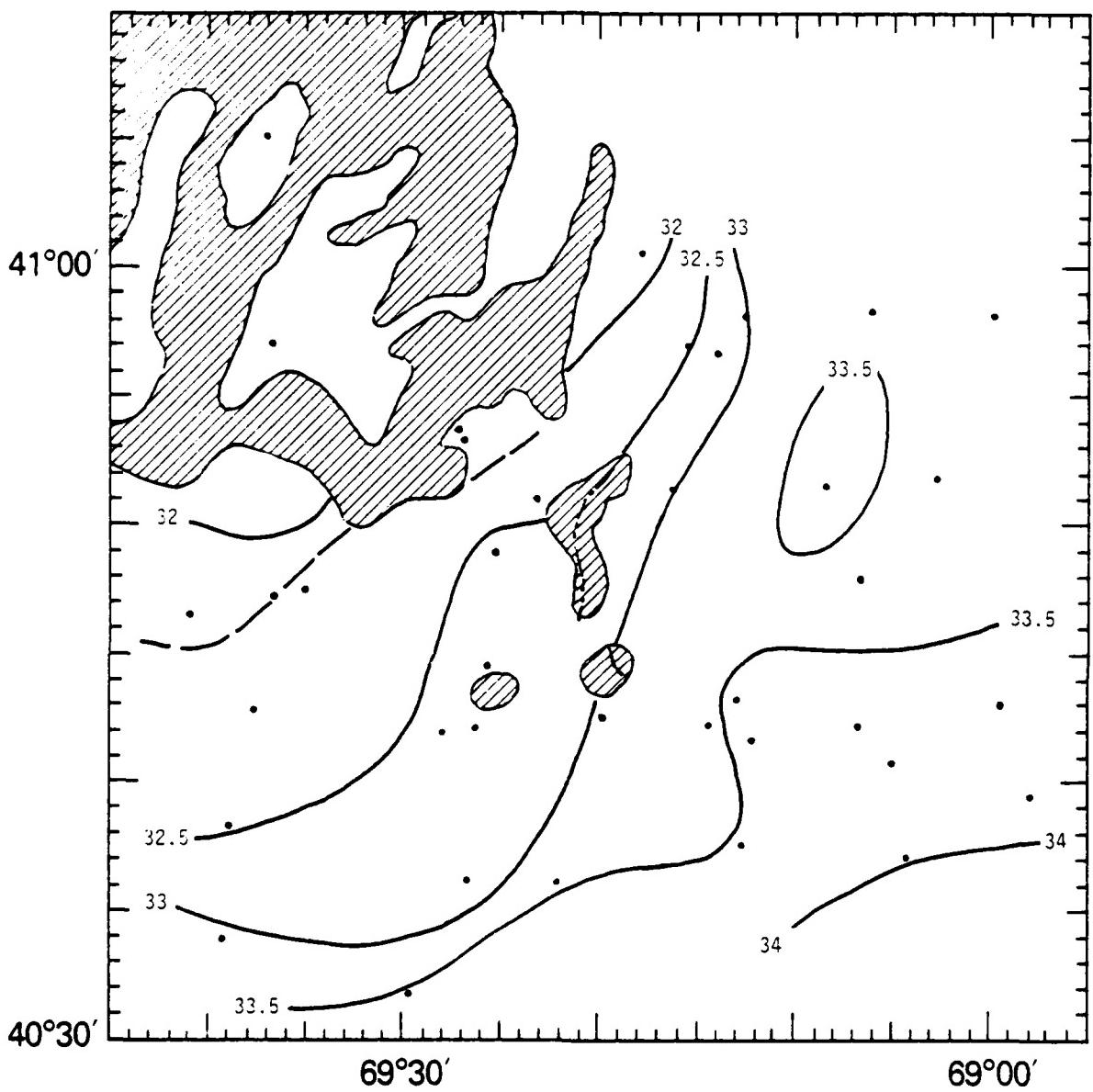


Fig. 5.11. Salinity field at 30 m tidally and temporally adjusted.

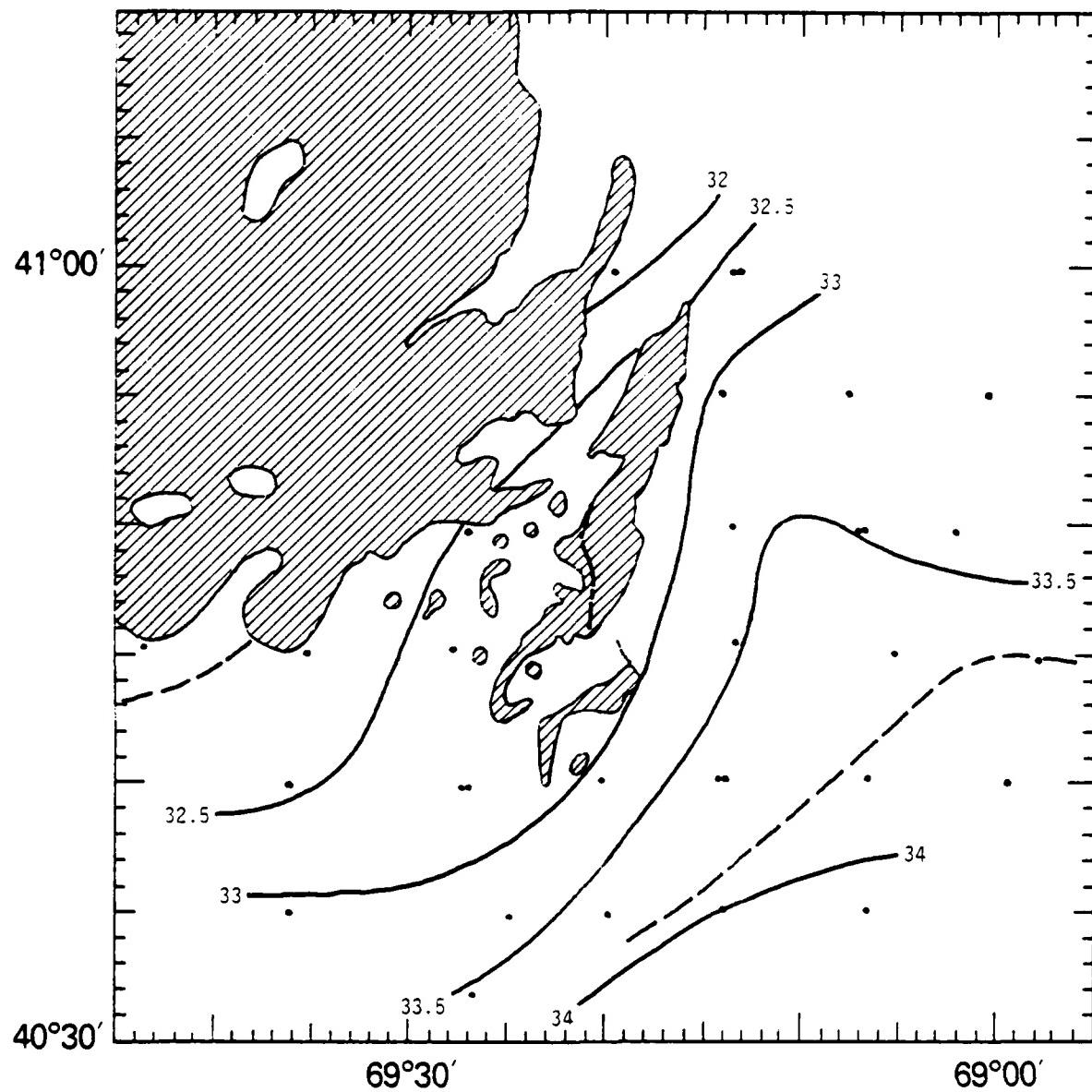


Fig. 5.12. Salinity field at 40 m temporally adjusted.

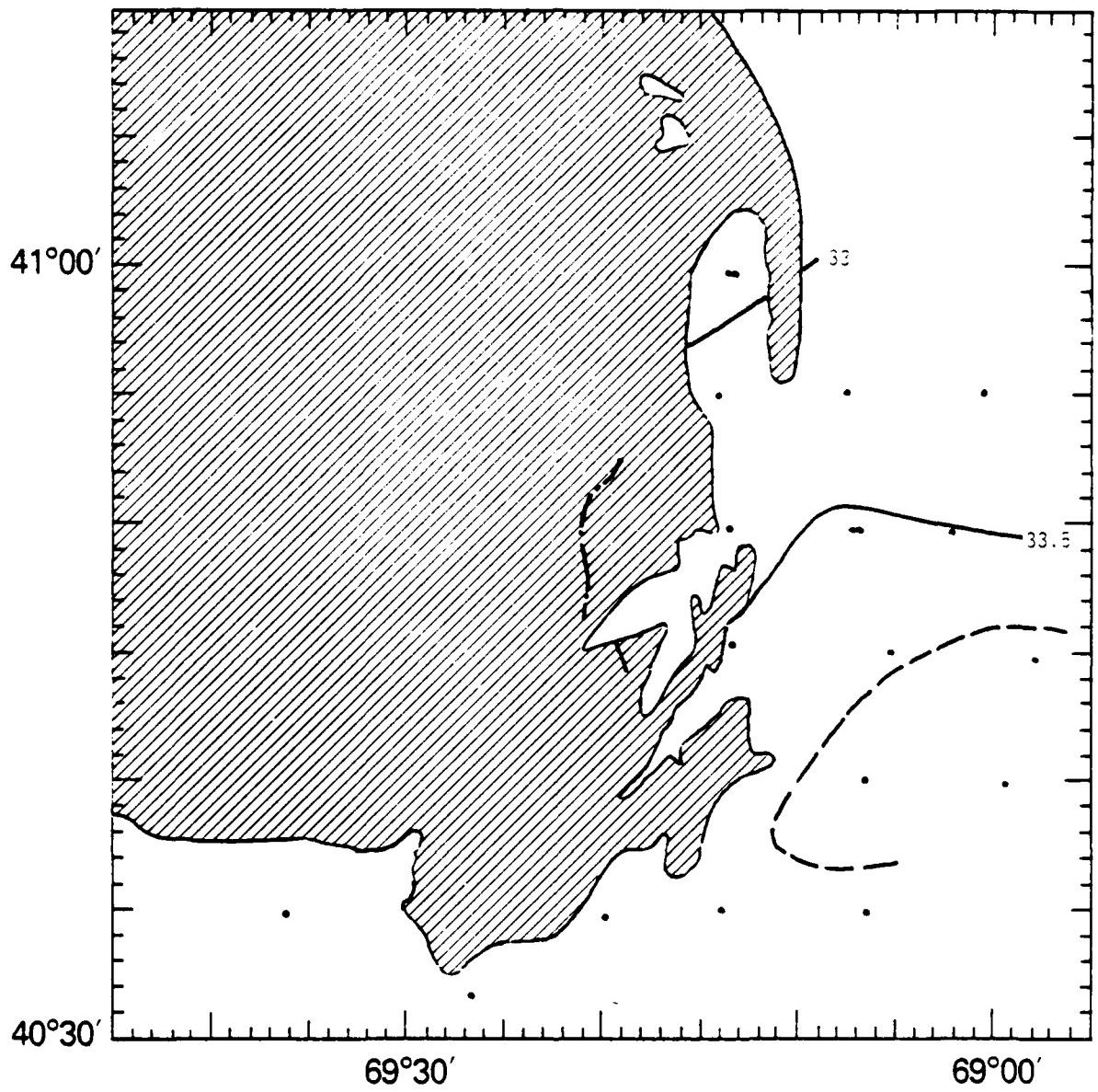


Fig. 5.13. Salinity field at 60 m temporally adjusted.

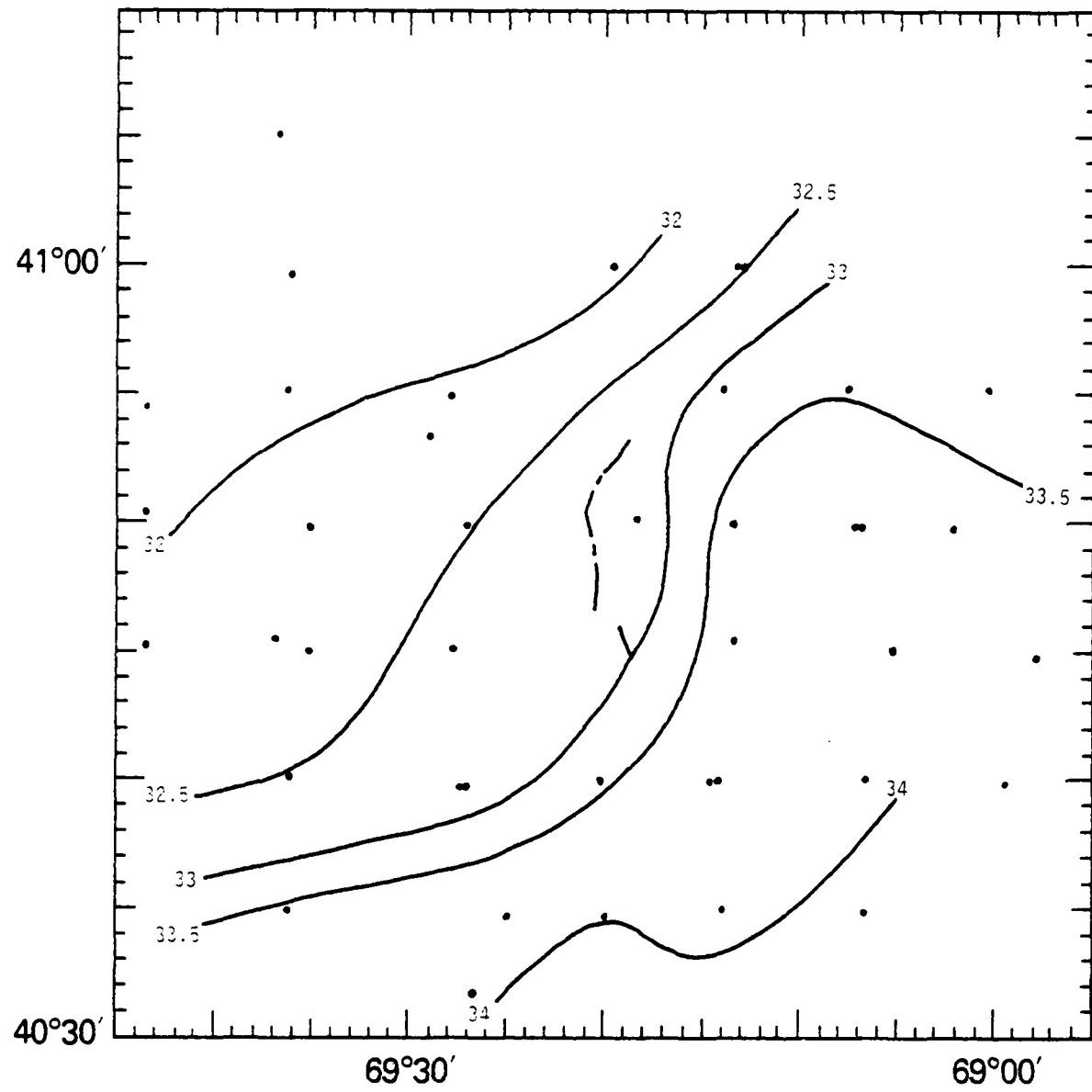


Fig. 5.14. Salinity field at the bottom temporally adjusted.

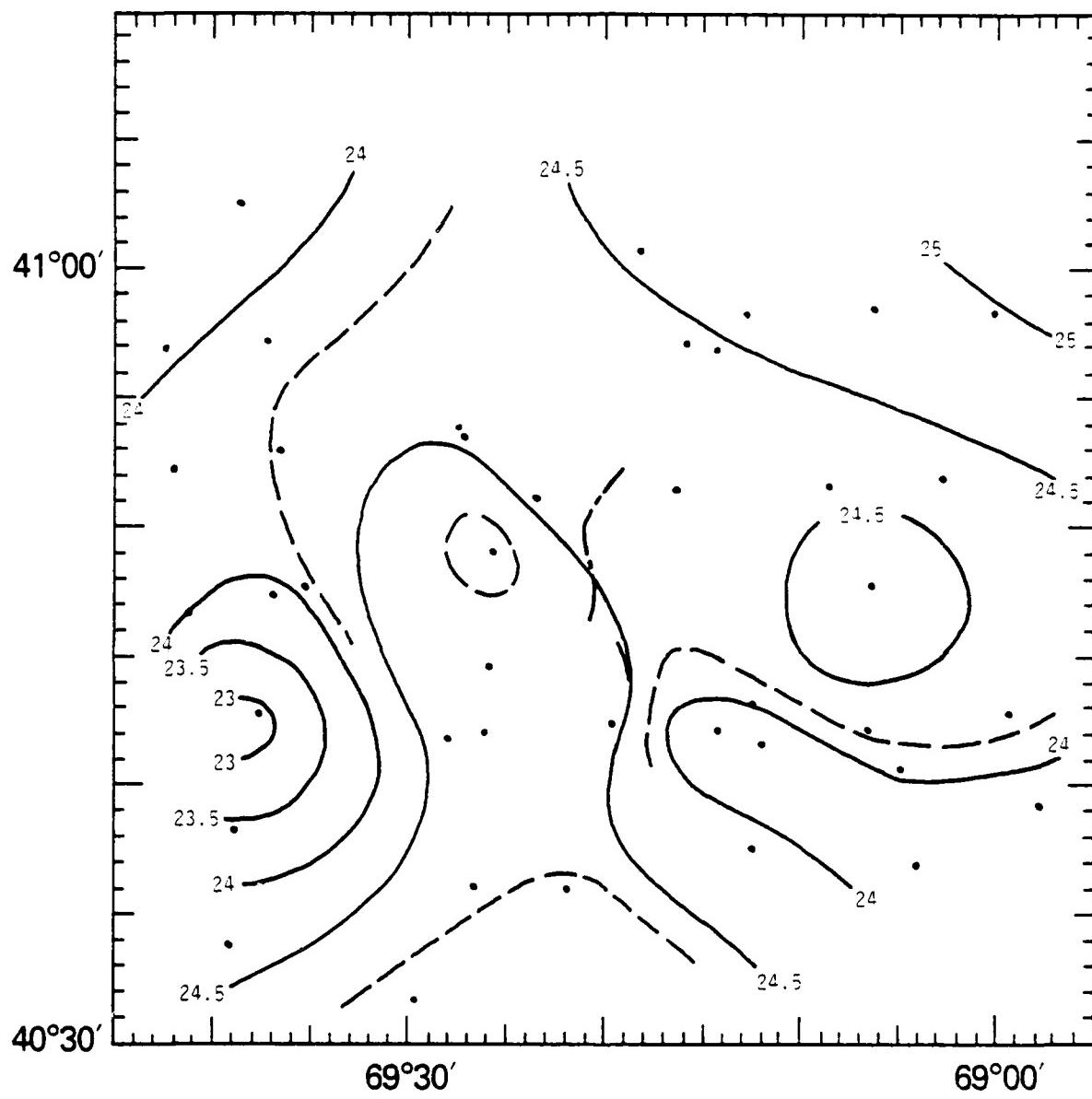


Fig. 5.15. Sigma-T field at 0 m.

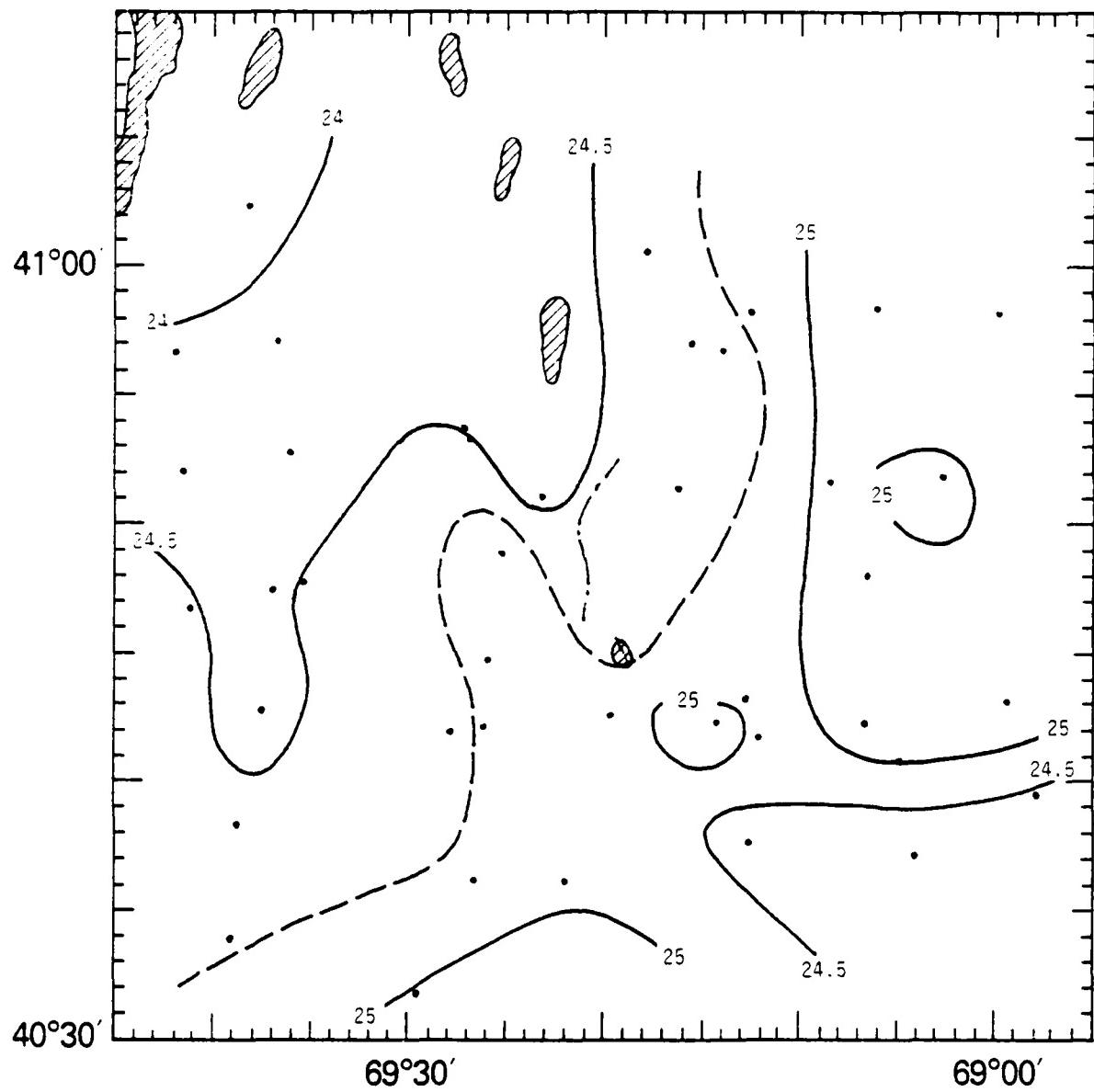


Fig. 5.16. Sigma-T field at 10 m.

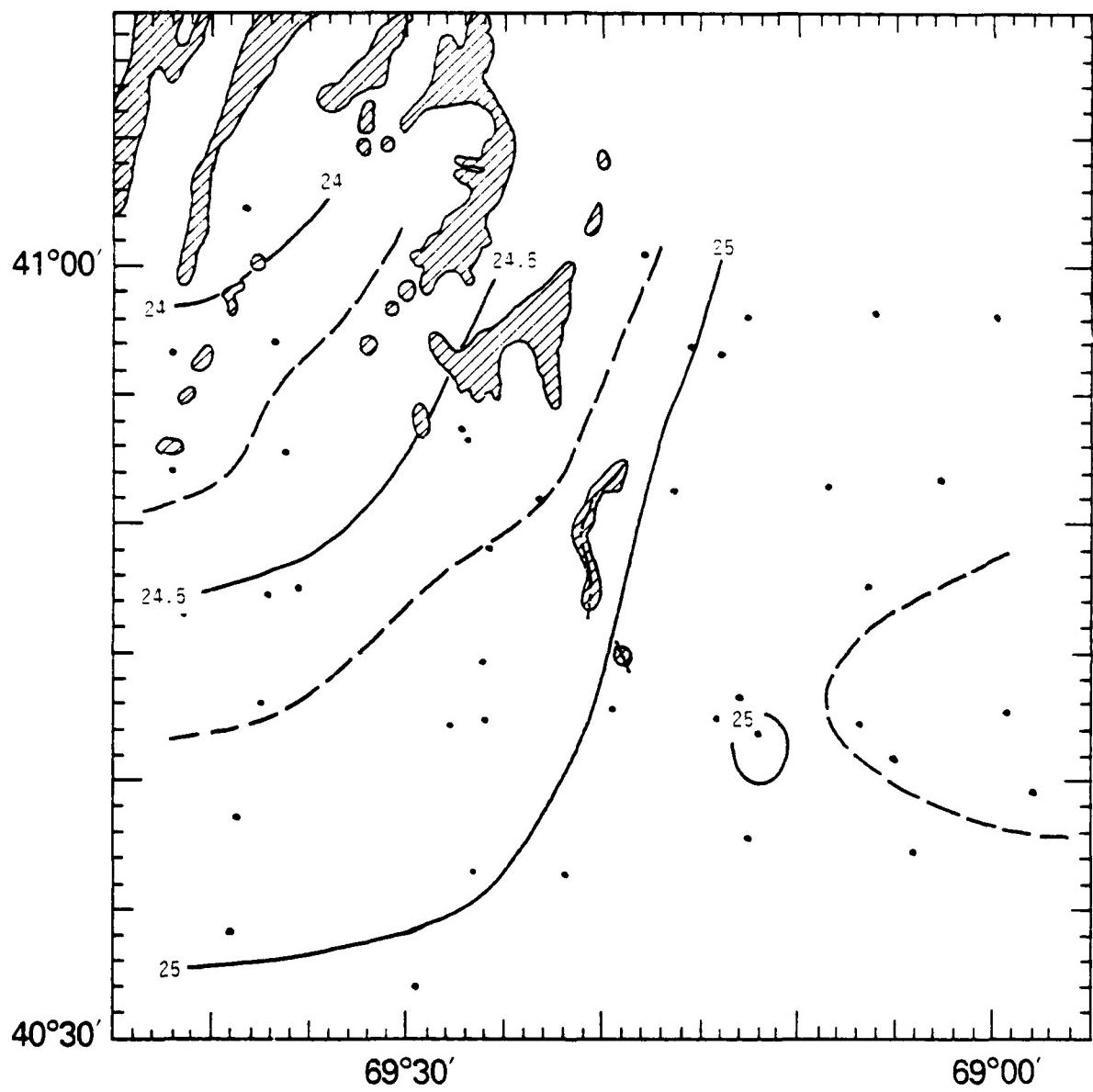


Fig. 5.17. Sigma-T field at 20 m.

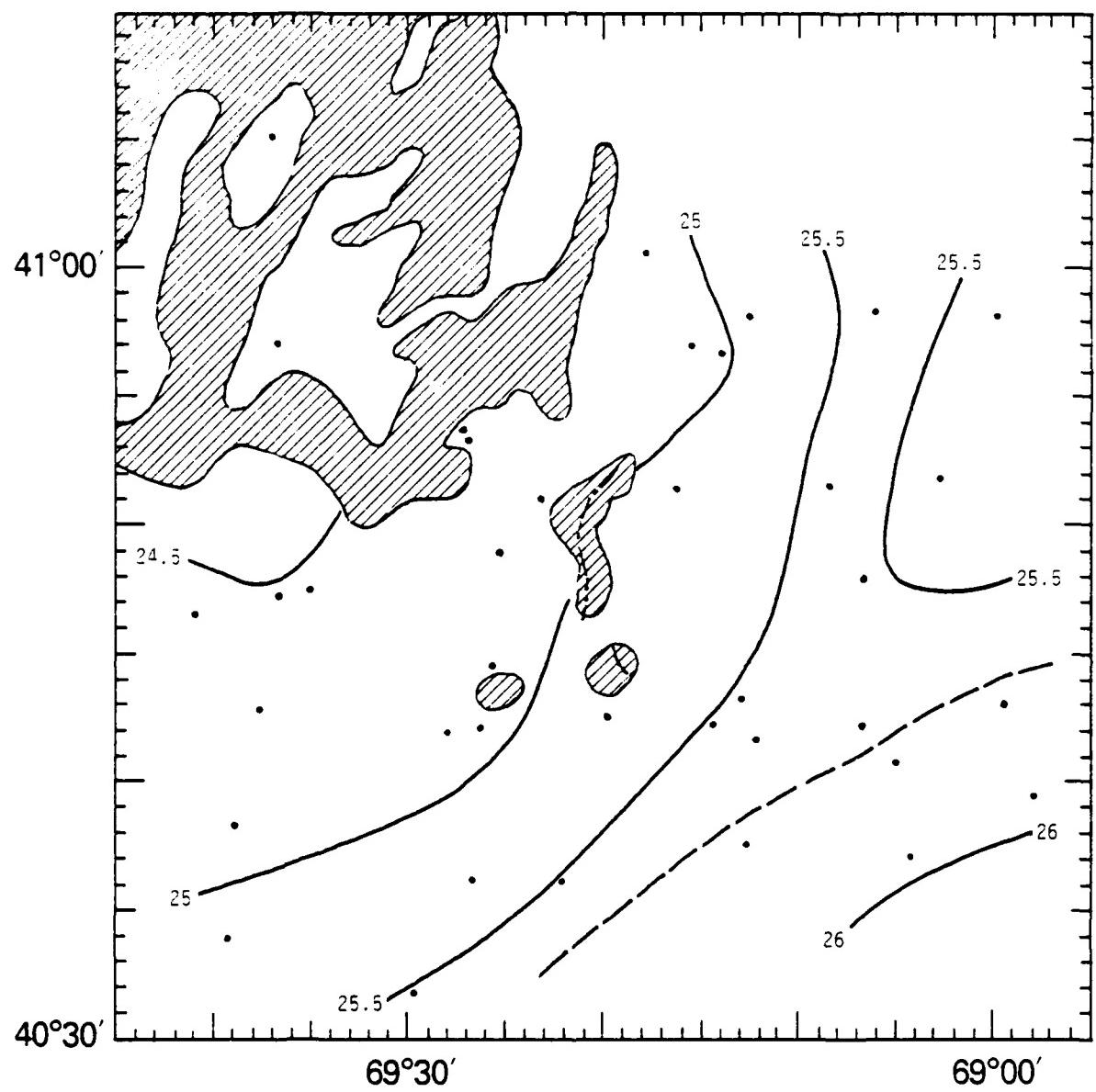


Fig. 5.18. Sigma-T field at 30 m.

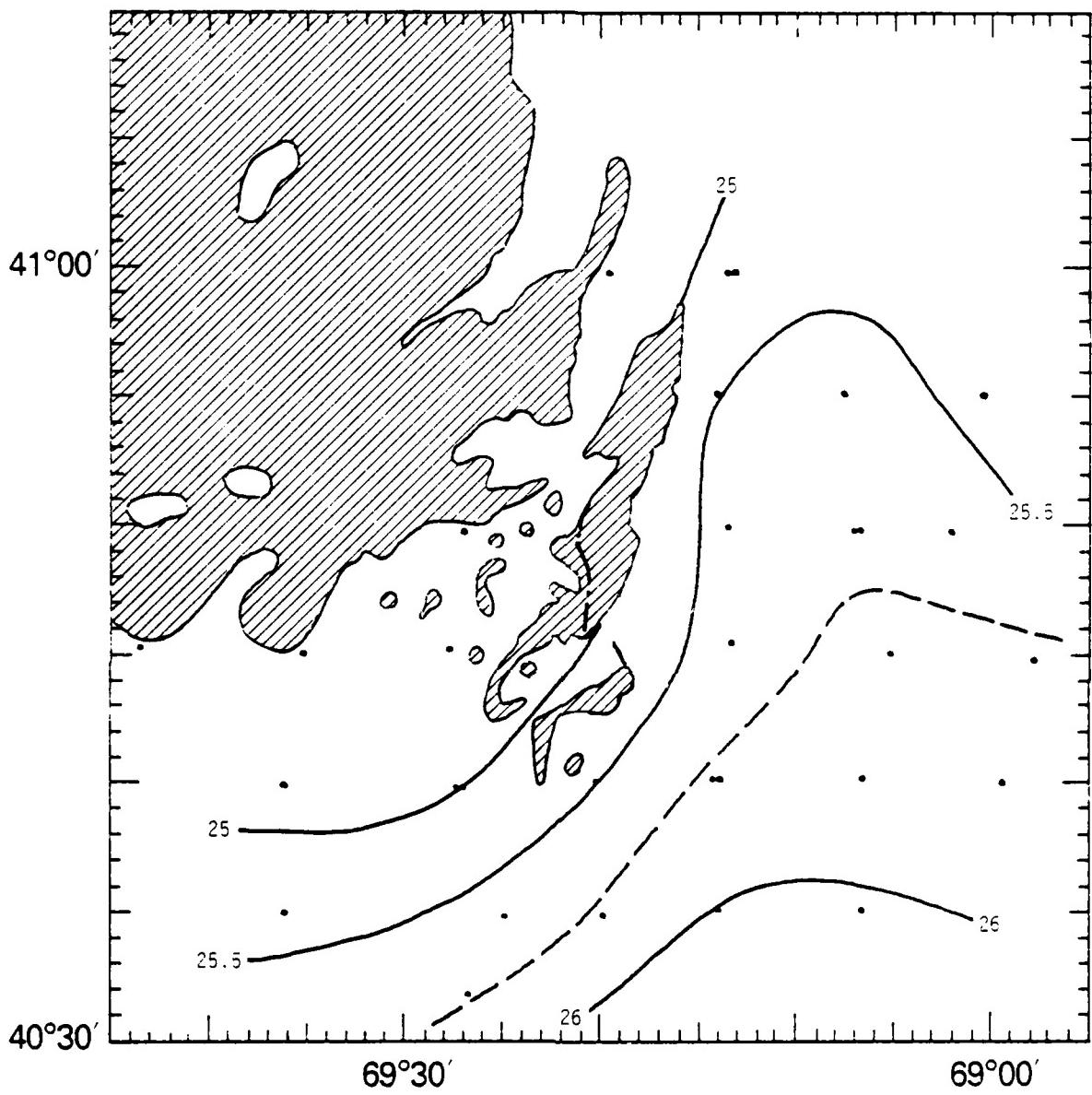


Fig. 5.19. Sigma-T field at 40 m.

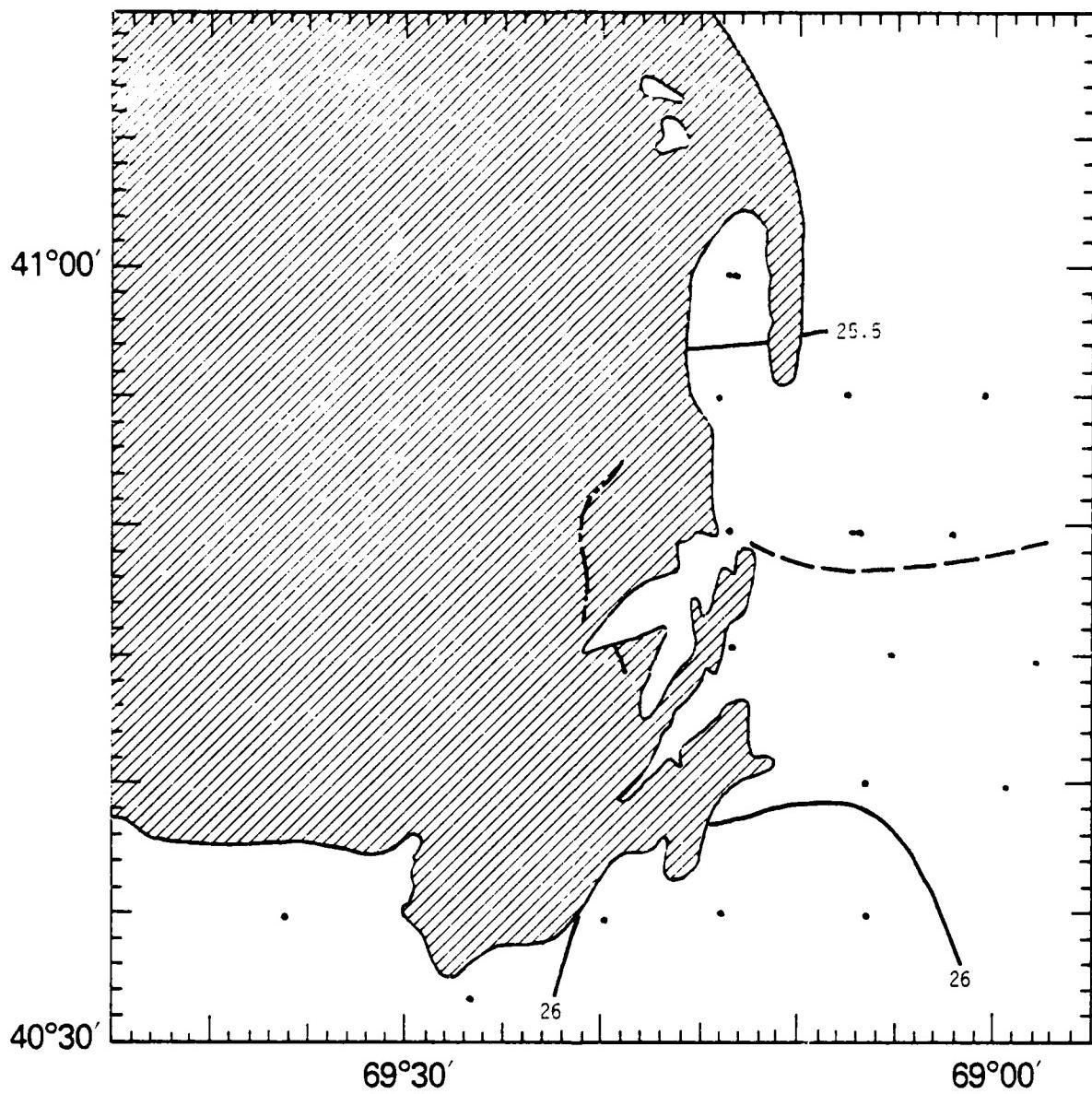


Fig. 5.20. Sigma-T field at 60 m.

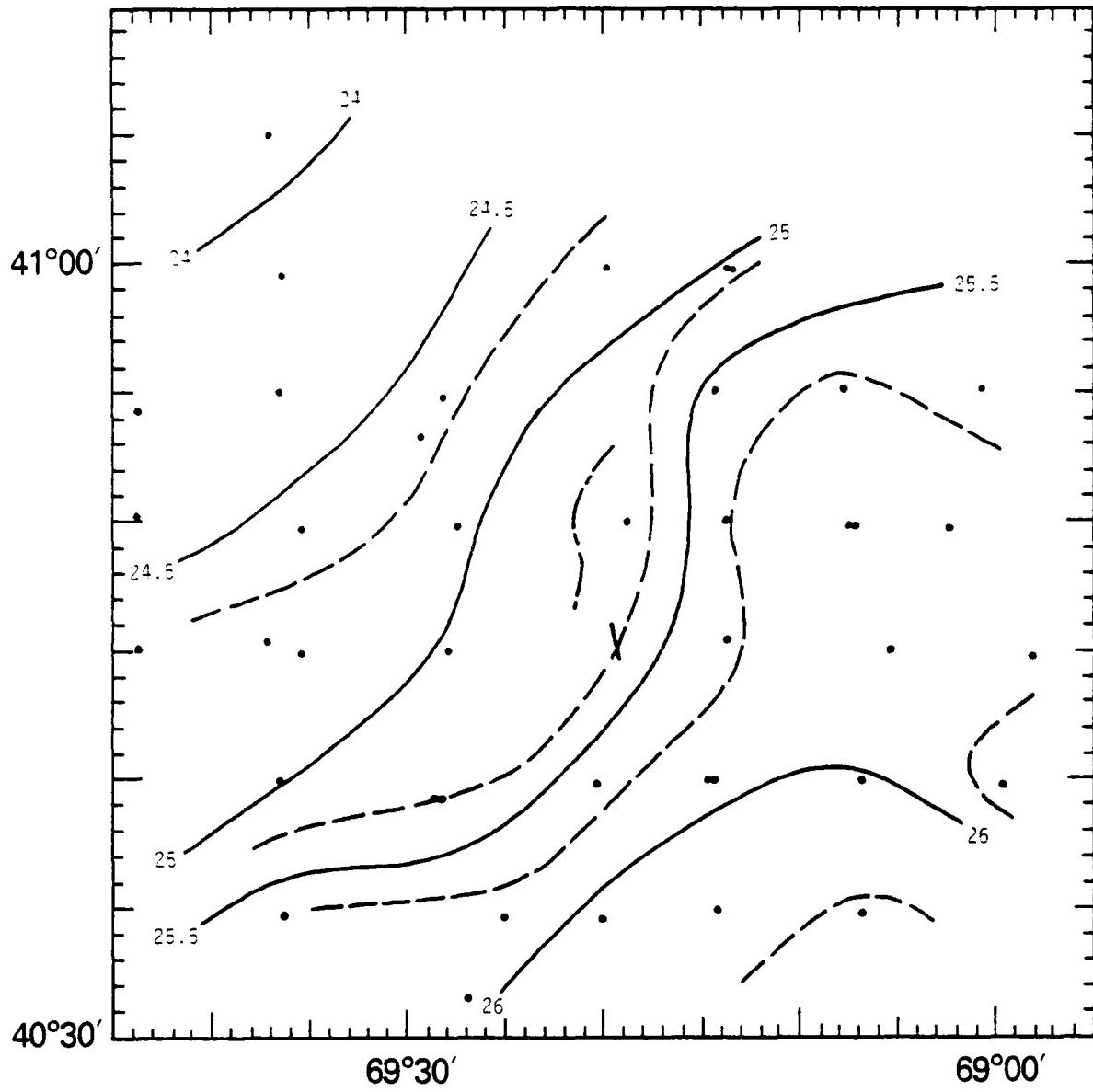


Fig. 5.21. Sigma-T field at bottom.

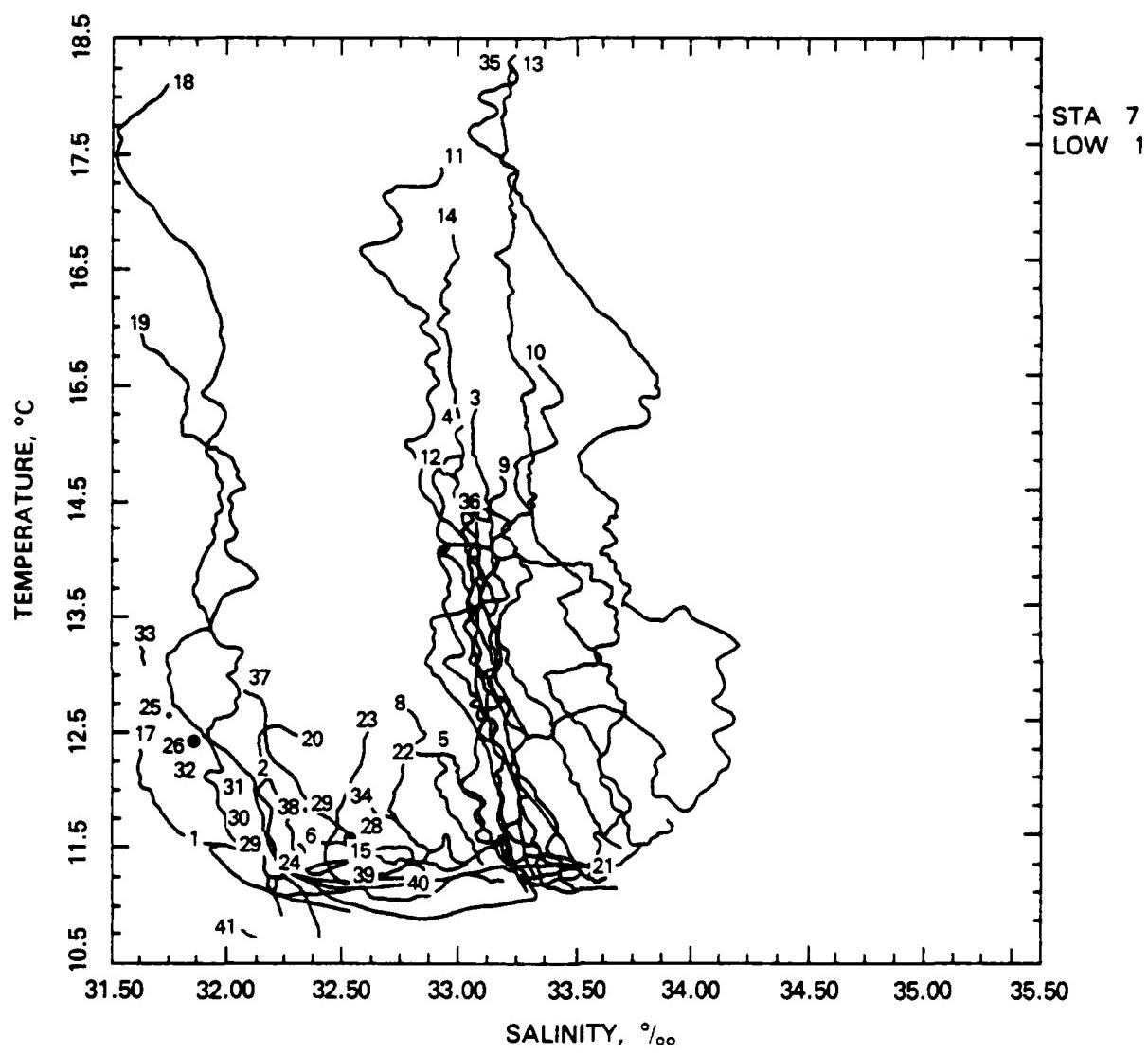


Fig. 5.22 (a) Composite T-S diagram

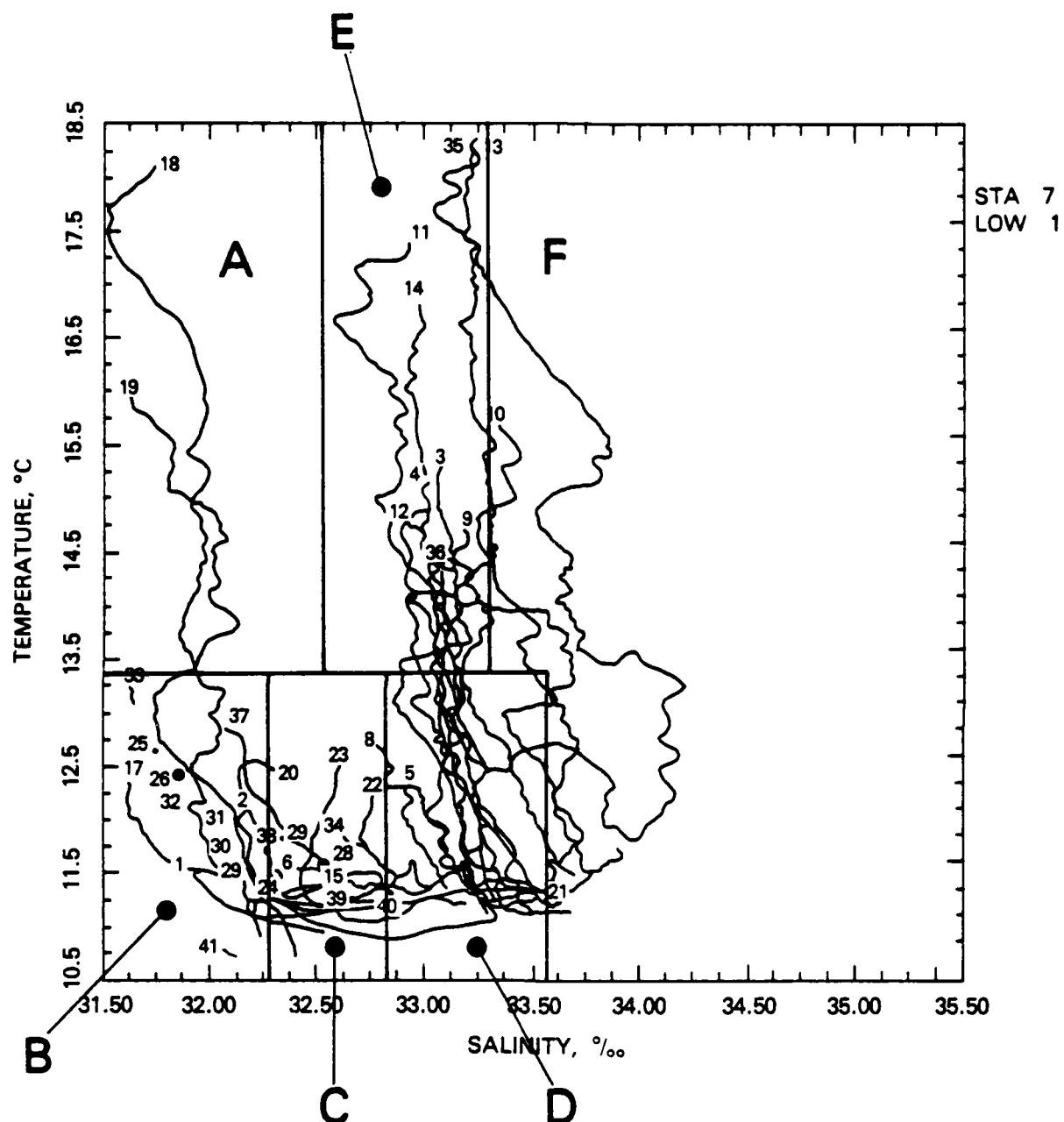


Fig. 5.22 (b) Delineation of 6 water types encountered in the Nantucket Shoals area.

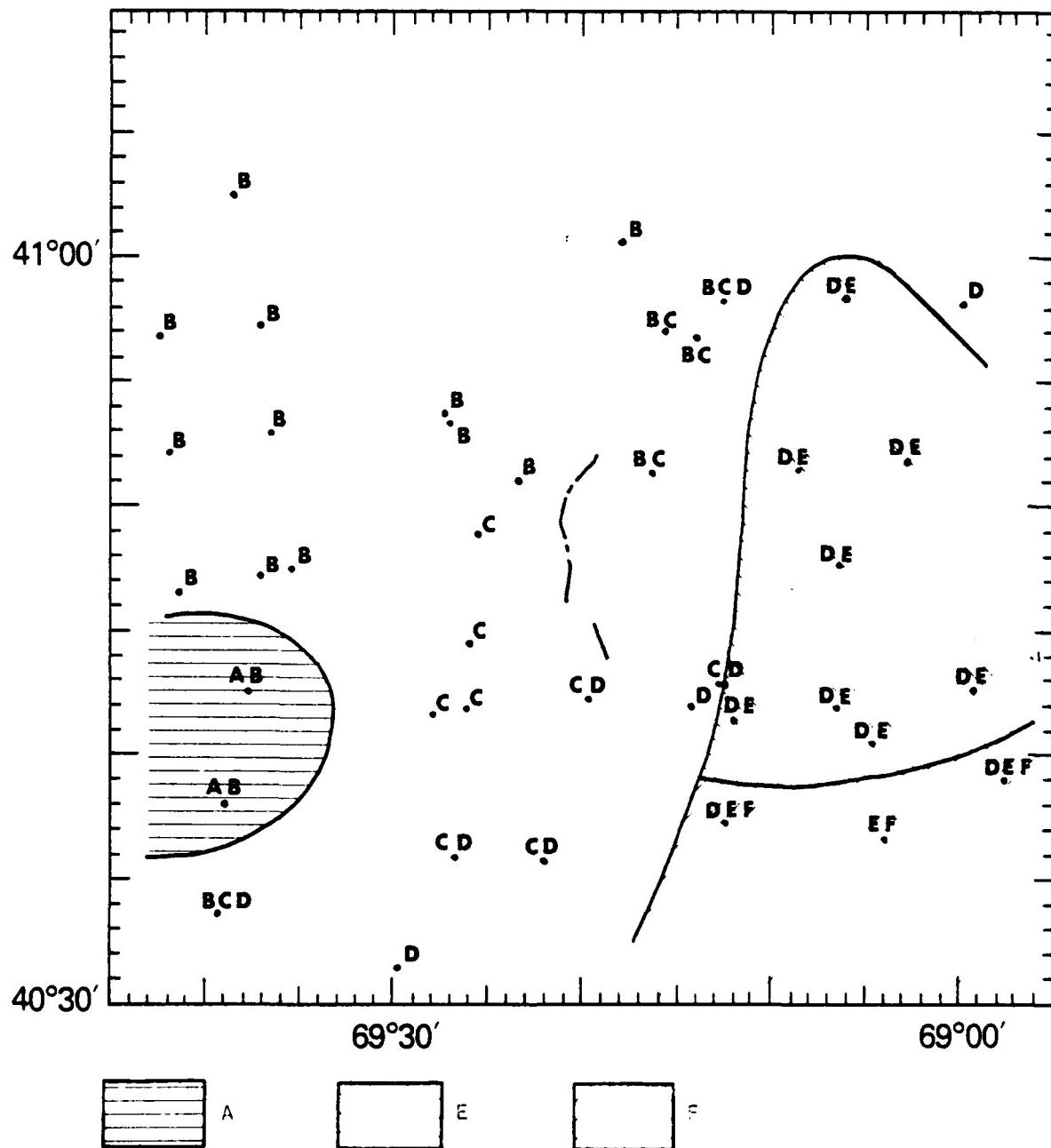


Fig. 5.23. Location of water types in the upper portion of the water column.

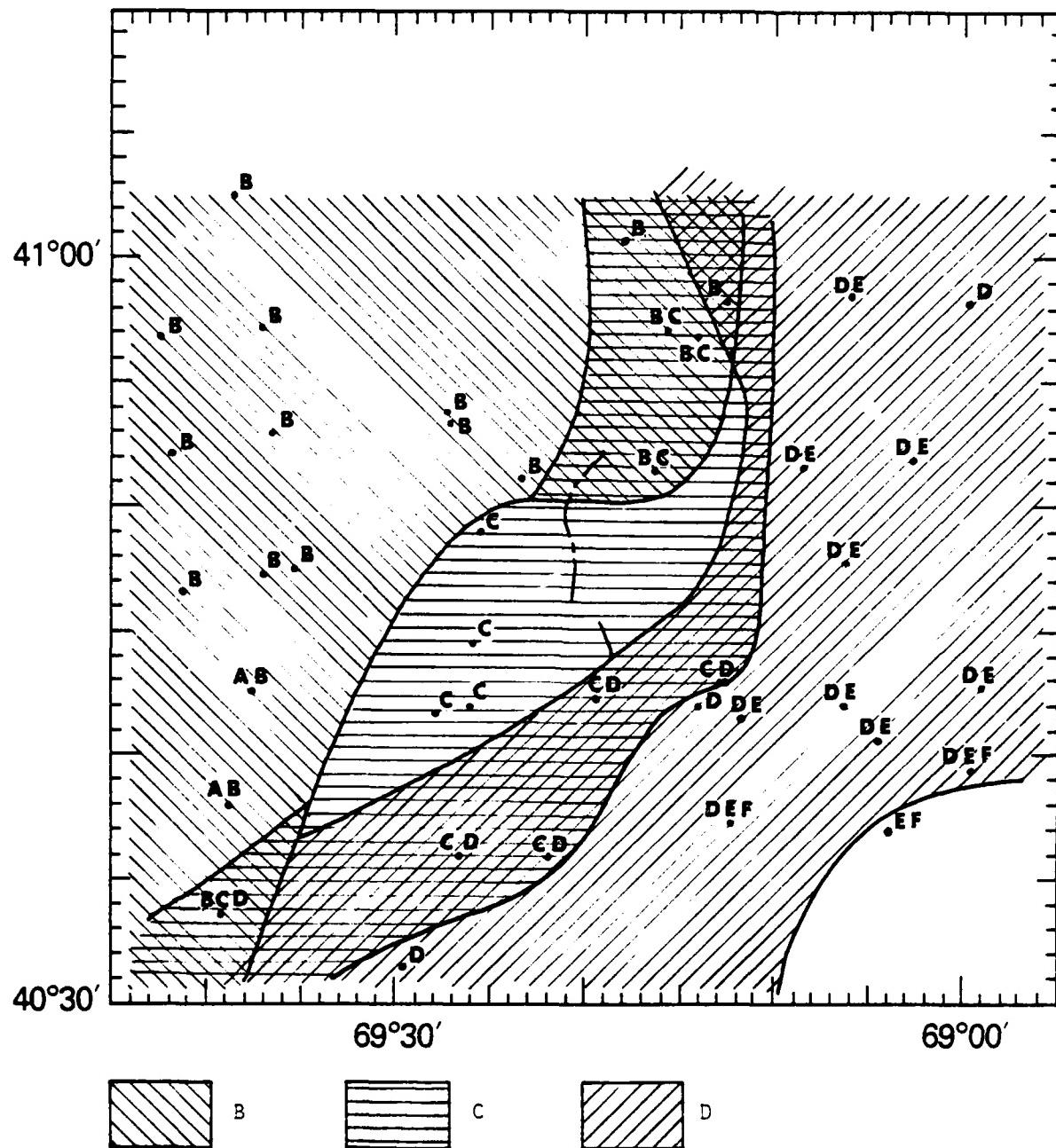


Fig. 5.24. Location of water types in the lower portion of the water column.

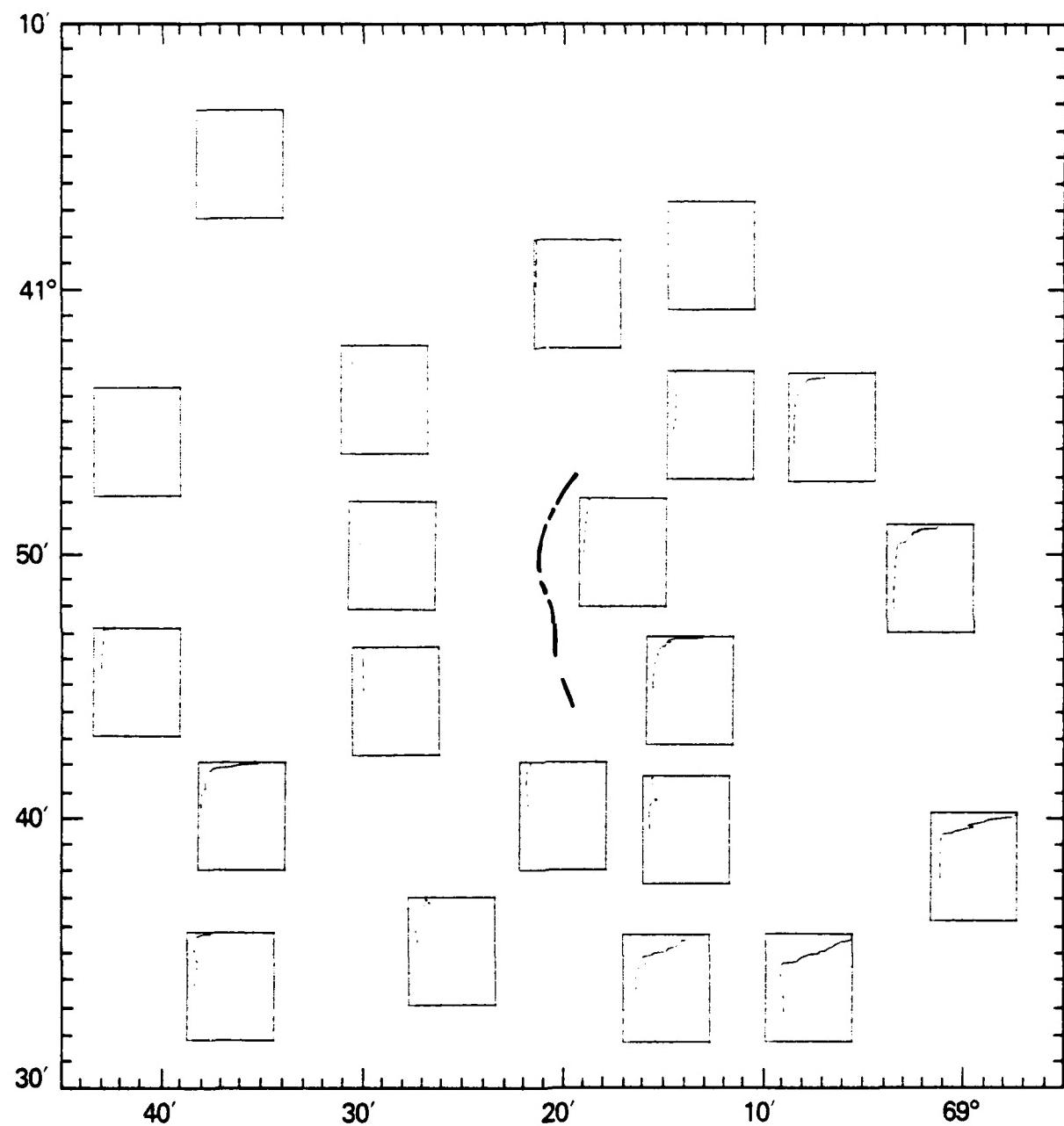


Fig. 5.25. Map of typical temperature profiles.

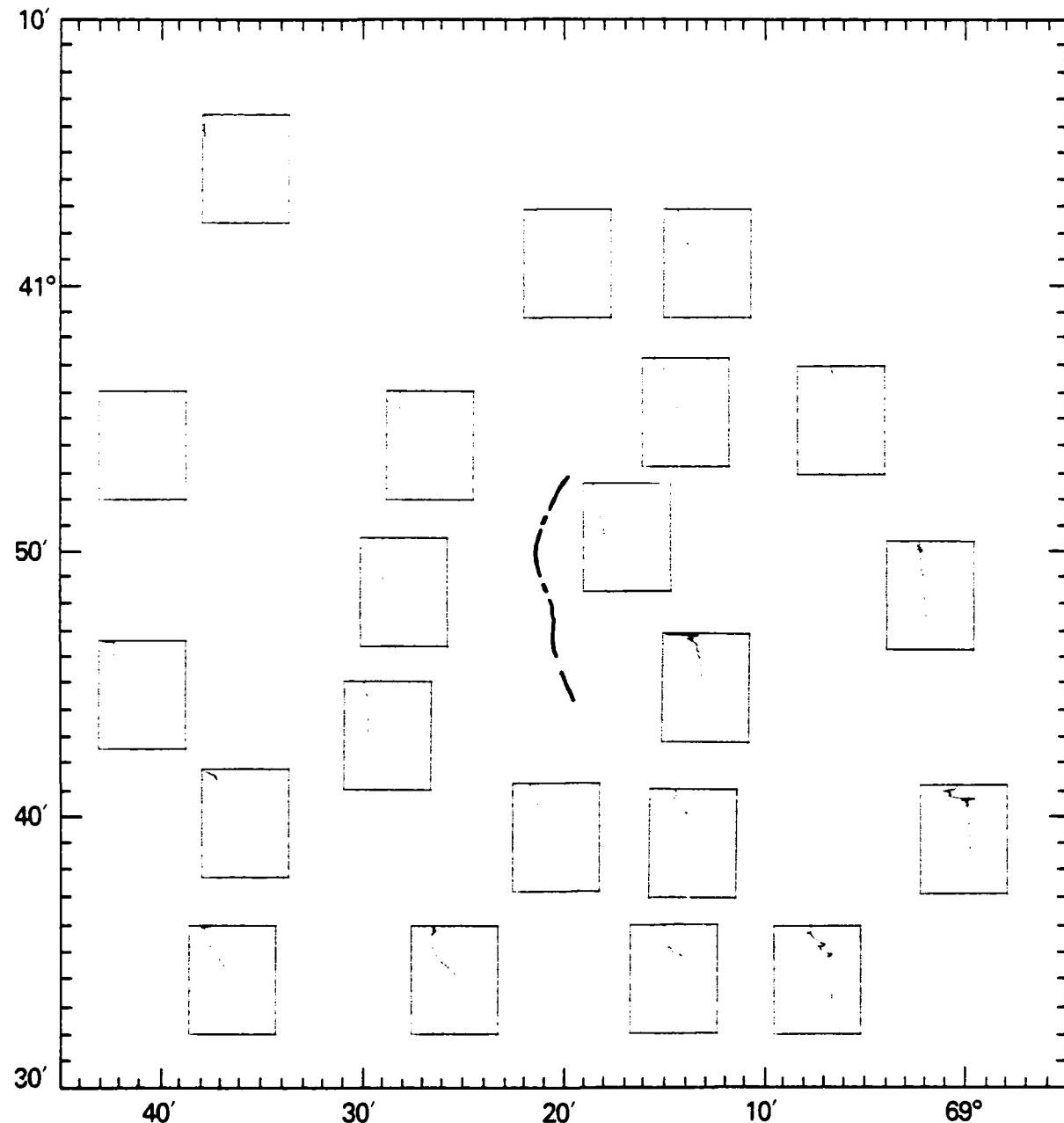


Fig. 5.26. Map of typical salinity profiles.

#### ACKNOWLEDGMENTS

This work was supported by the Naval Research Laboratory core program. Scientific and technical personnel who contributed to this work were W. Garrett, NRL Code 4350, senior scientist; Jack Ostrander, NRL Code 5004, navigator; Lee Houston, Ralph Gallatin and William Robey, NRL Code 5004, technicians; and especially CAPT John W. Arens and the crew of the USNS HAYES who operated in extremely difficult conditions.

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#### APPENDIX A. PLOTS OF CTD CASTS

Lowerings 1 to 41 are plotted sequentially in Figs. A.1 to A.41. The left-hand plate contains profiles of temperature (solid line), salinity (long dashed line) and sigma-T (short dashed line). The right-hand plate is the T-S diagram for the lowering. All casts are plotted on uniform size blocks with uniform axes. These data have been processed in accordance with IV-A.

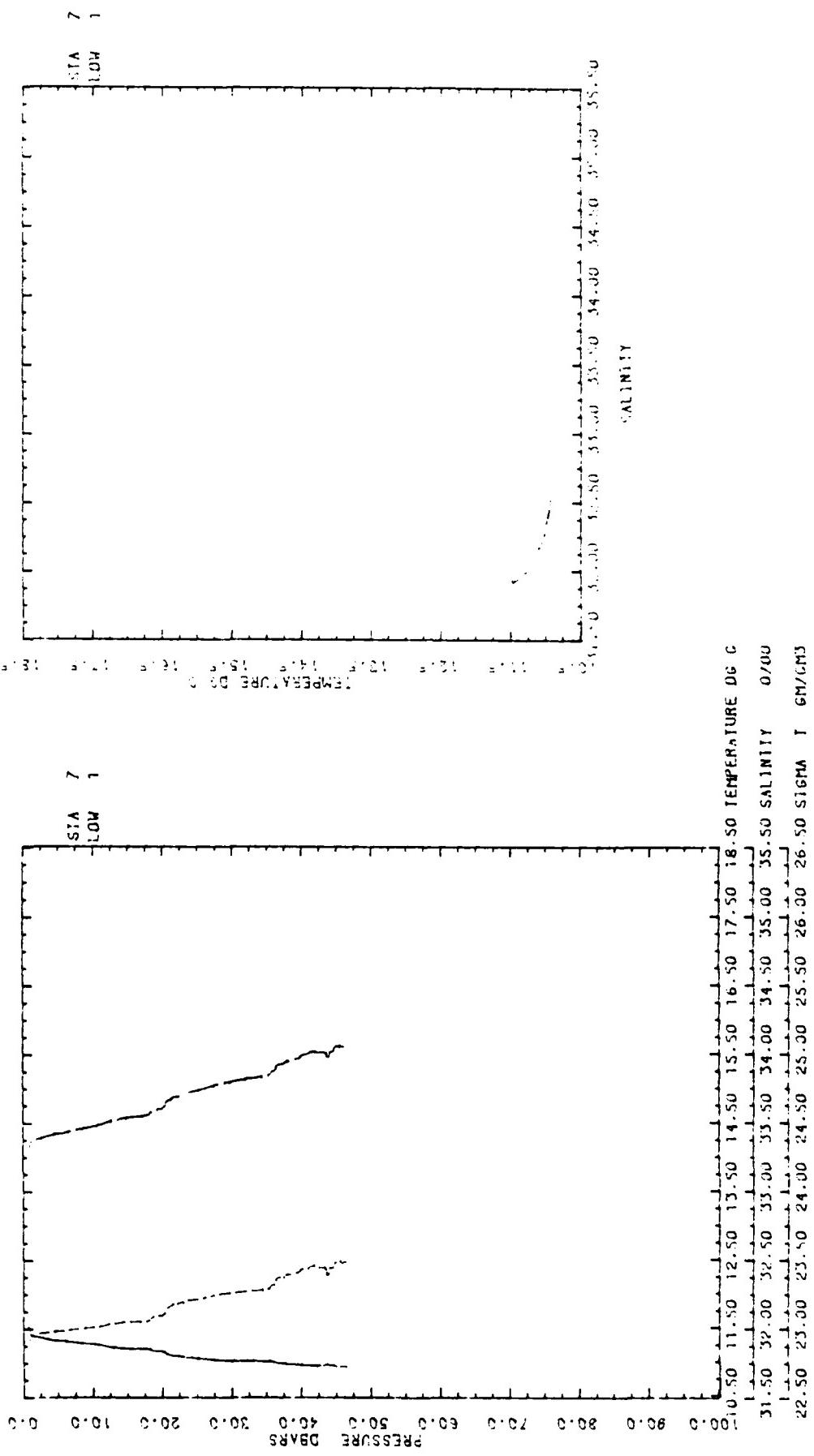


Figure A.1

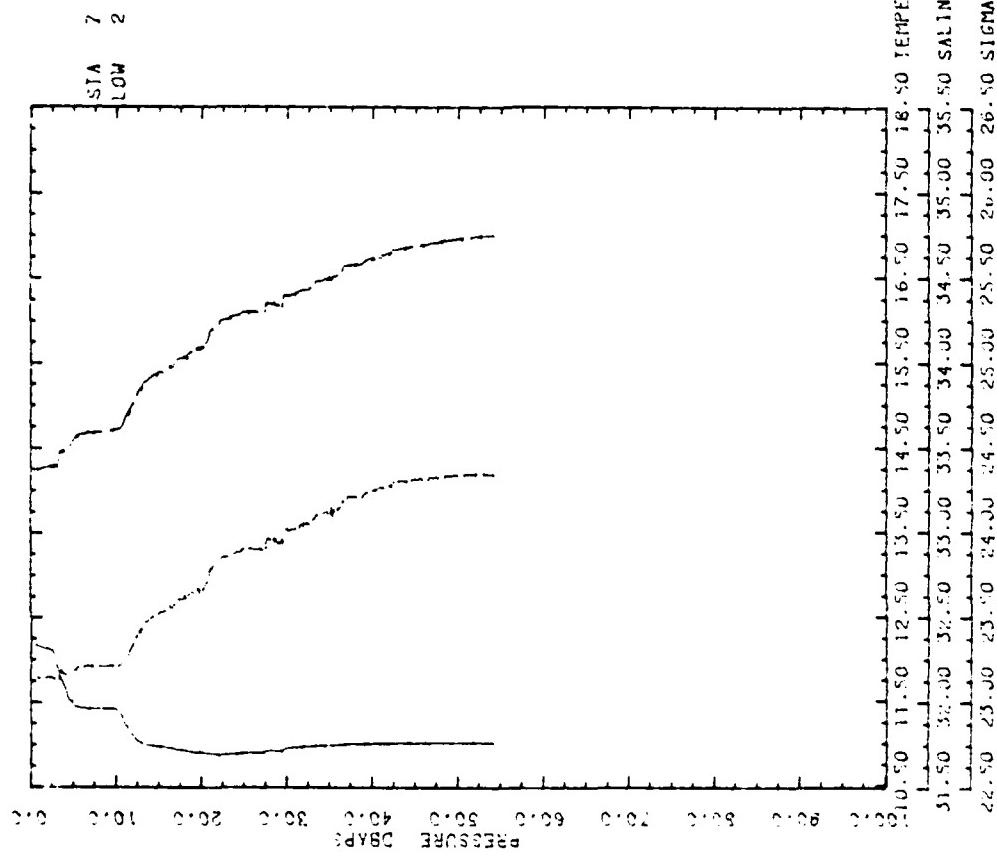
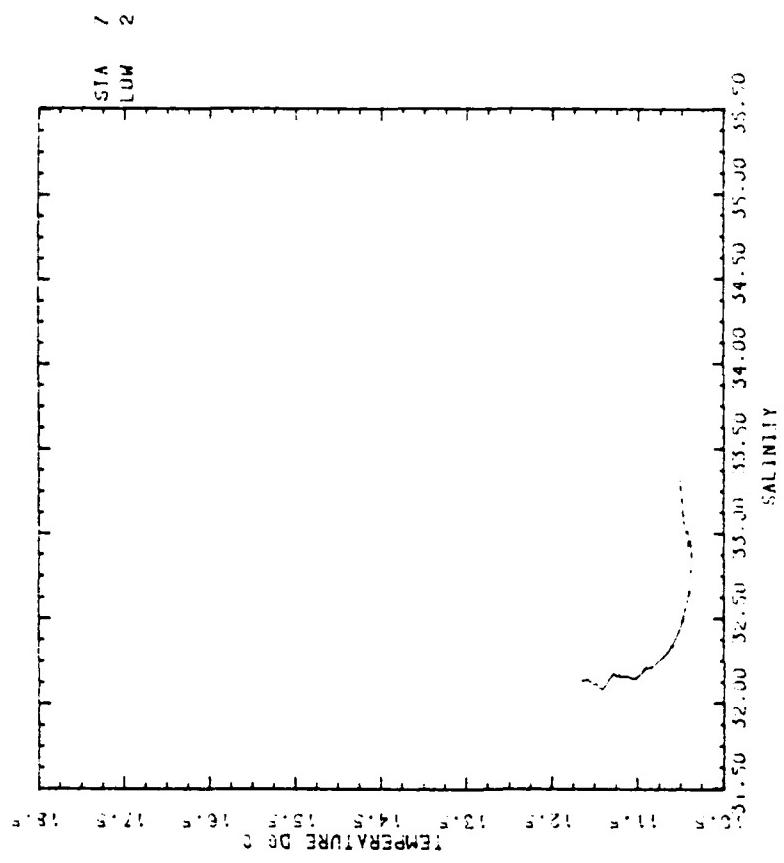


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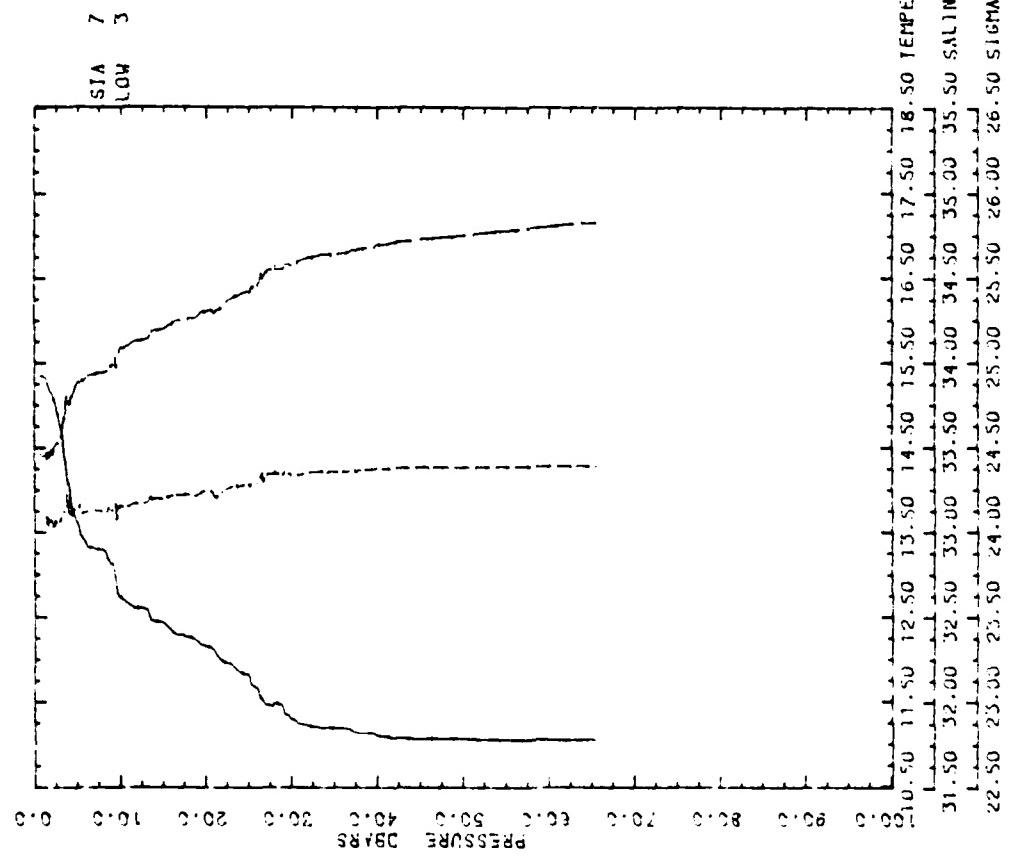
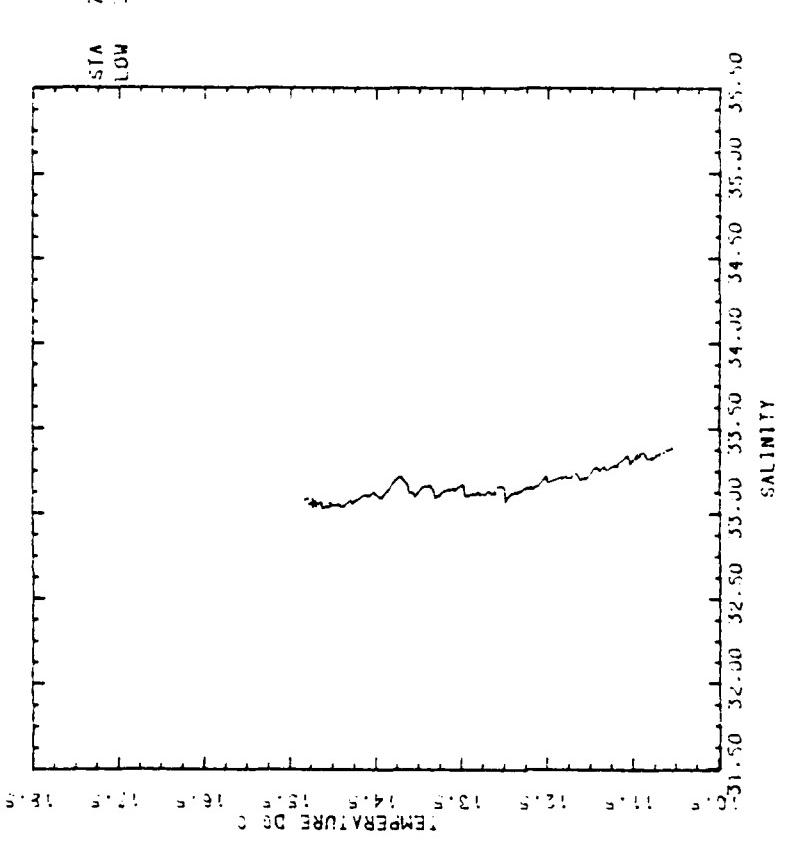


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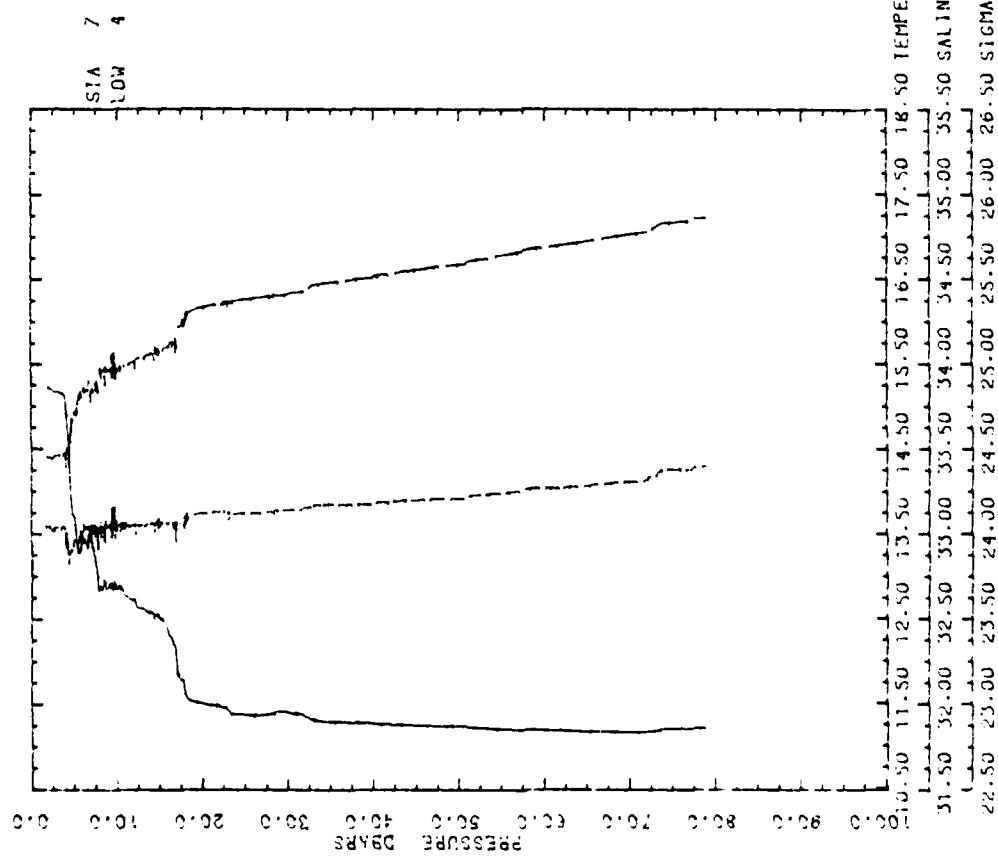
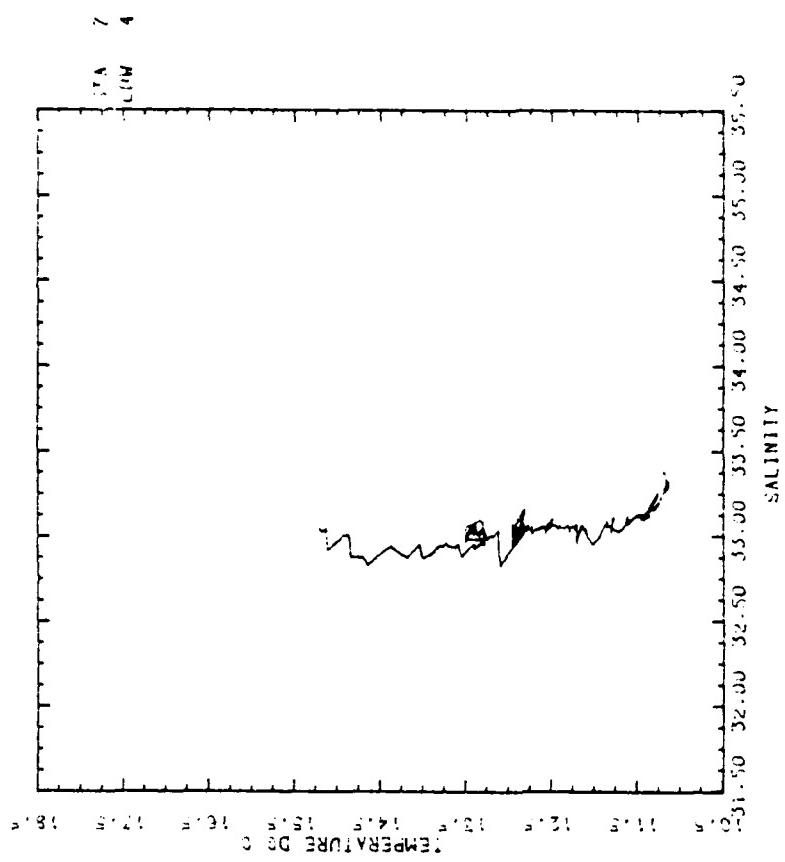
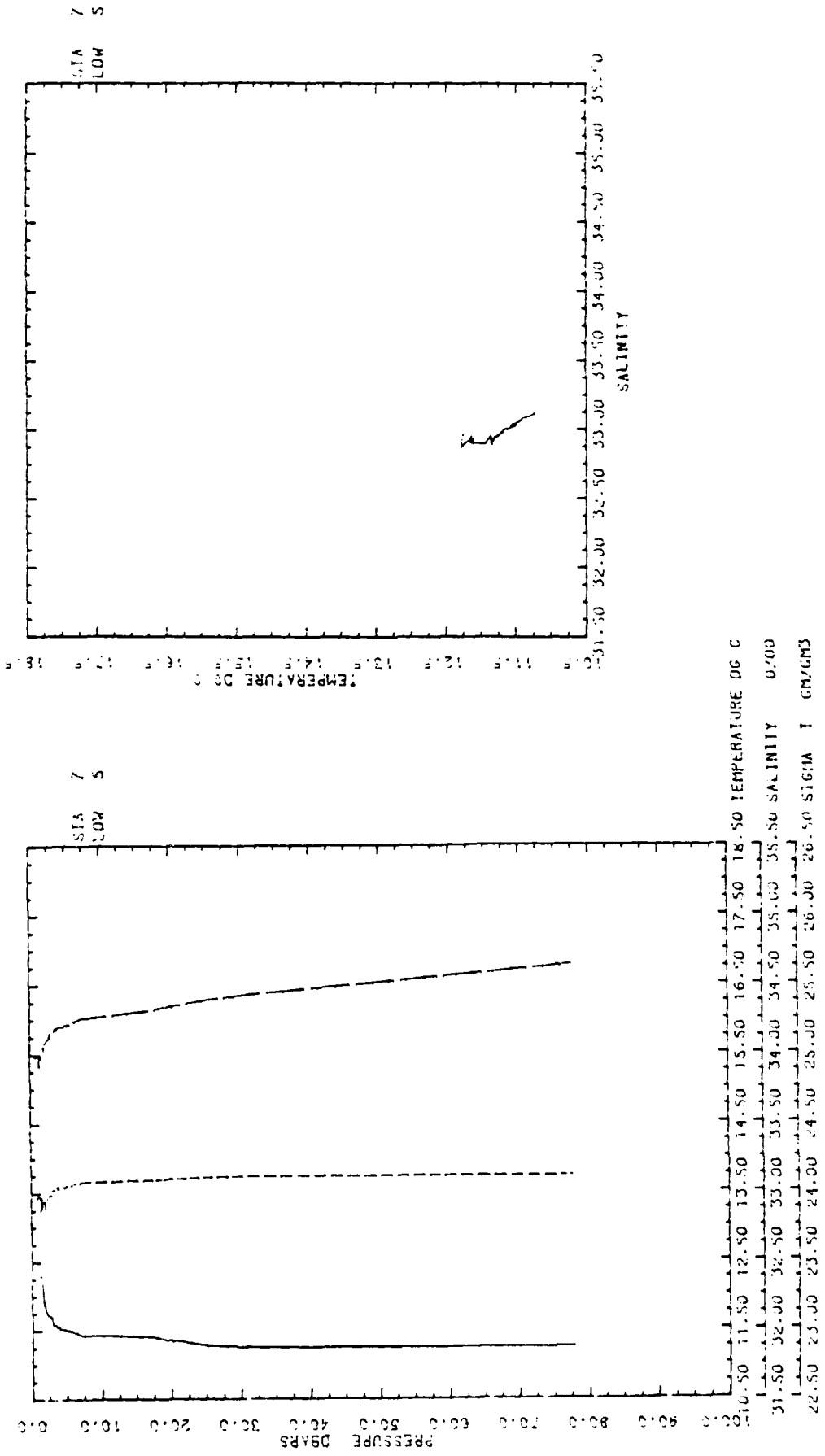


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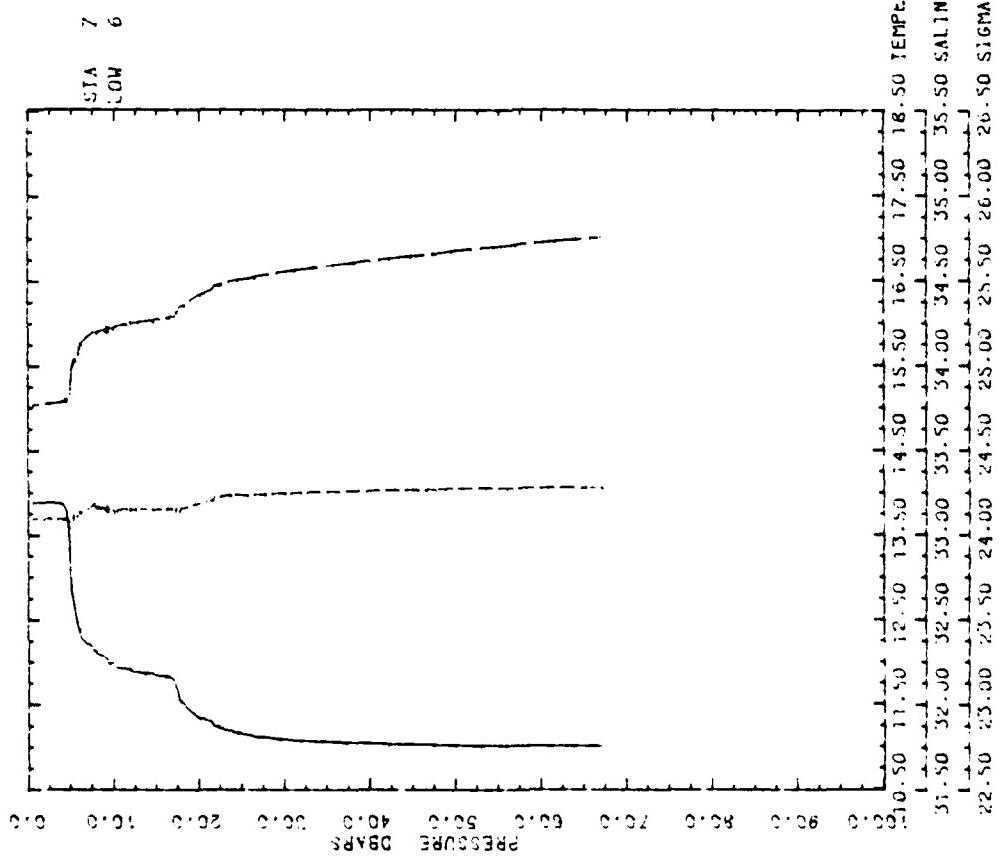
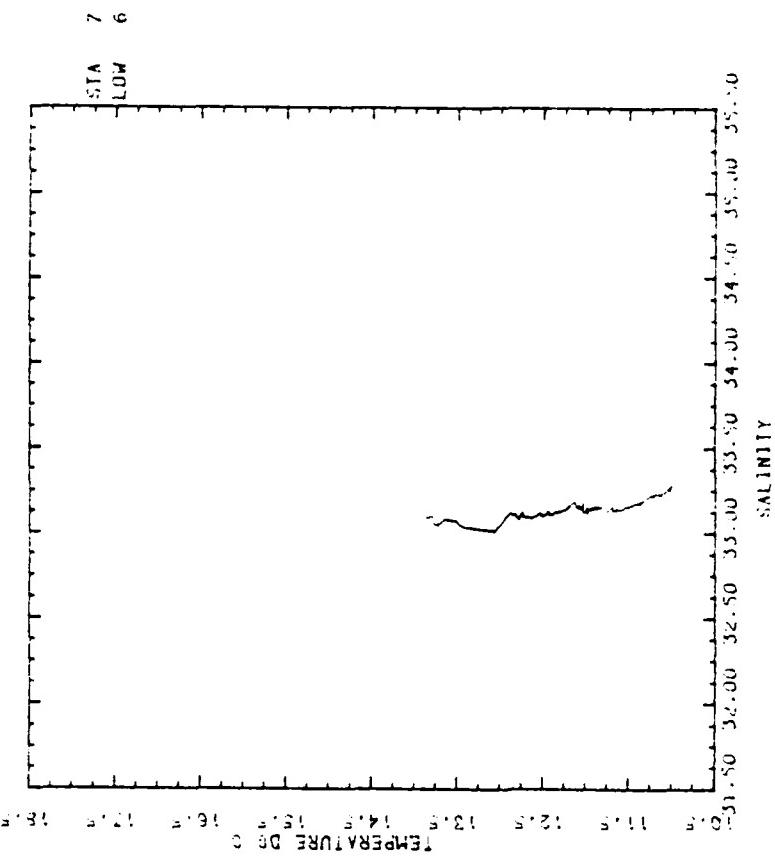


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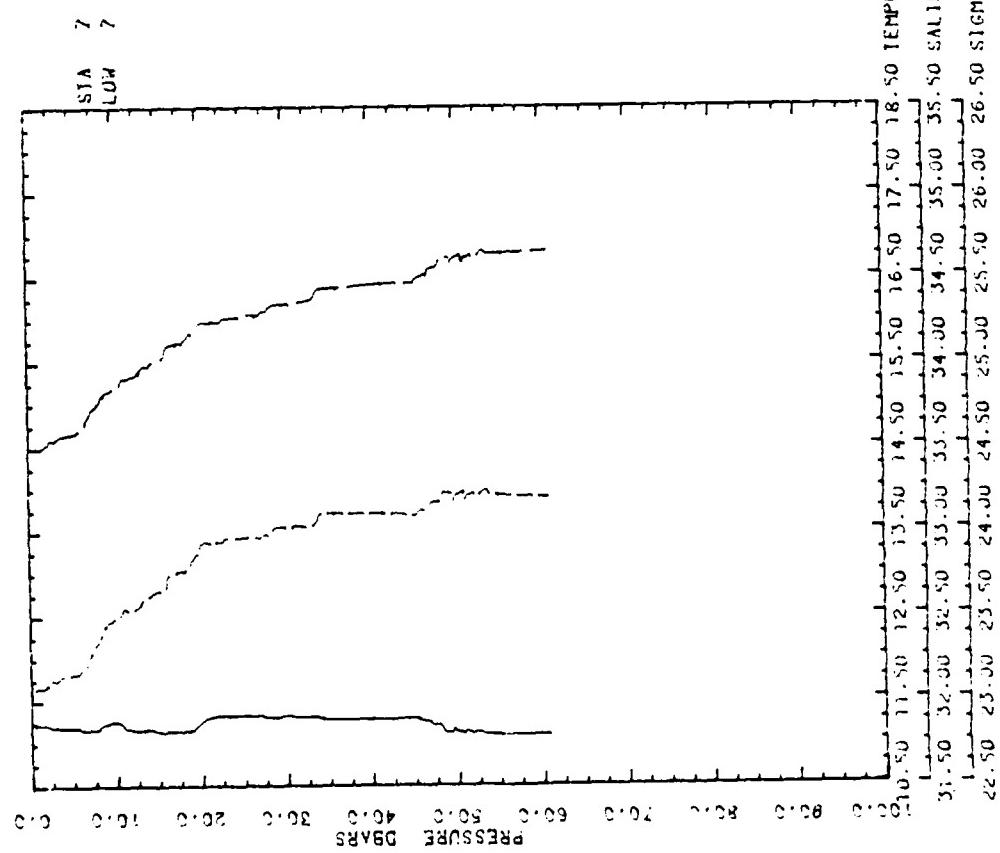
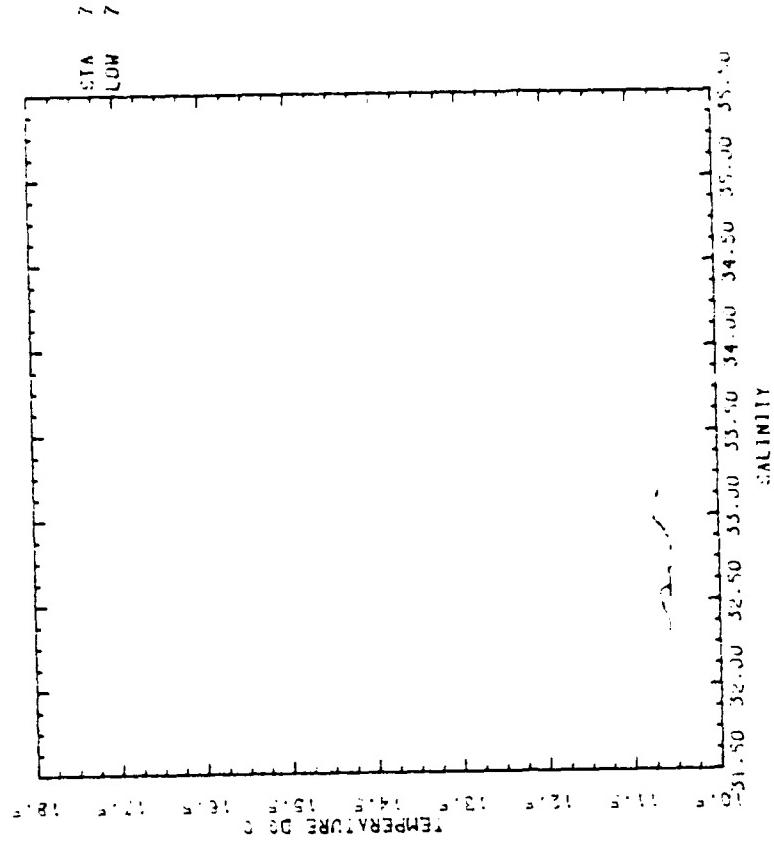


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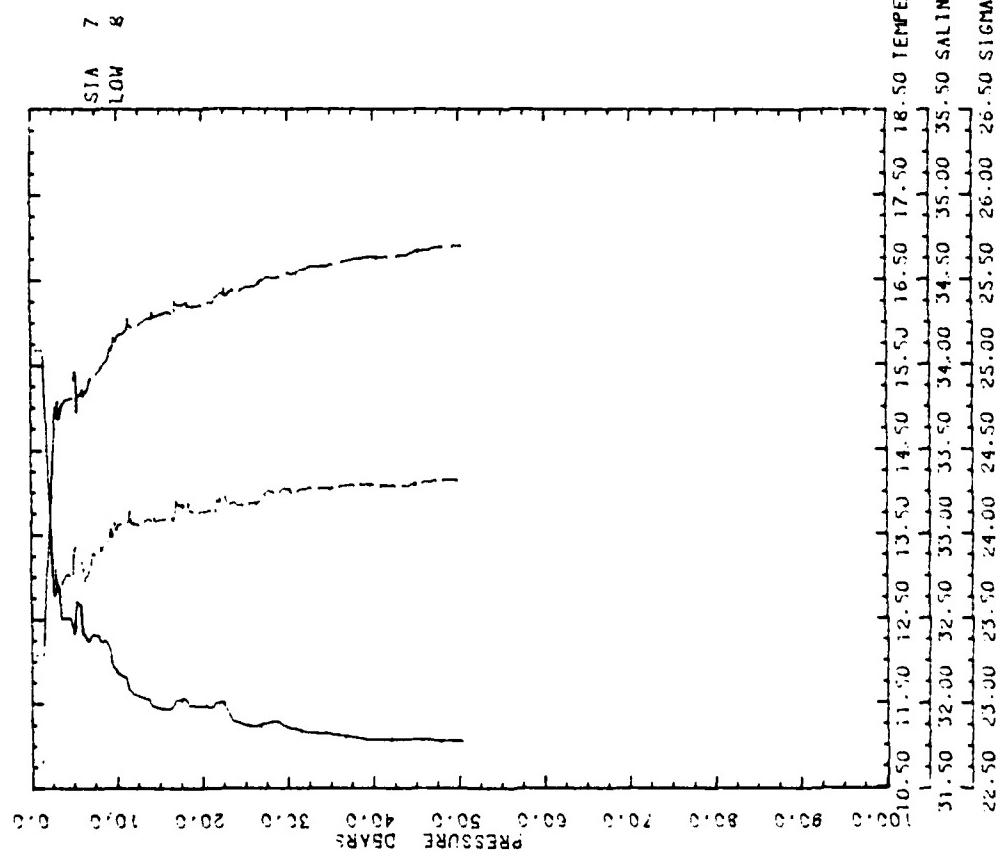
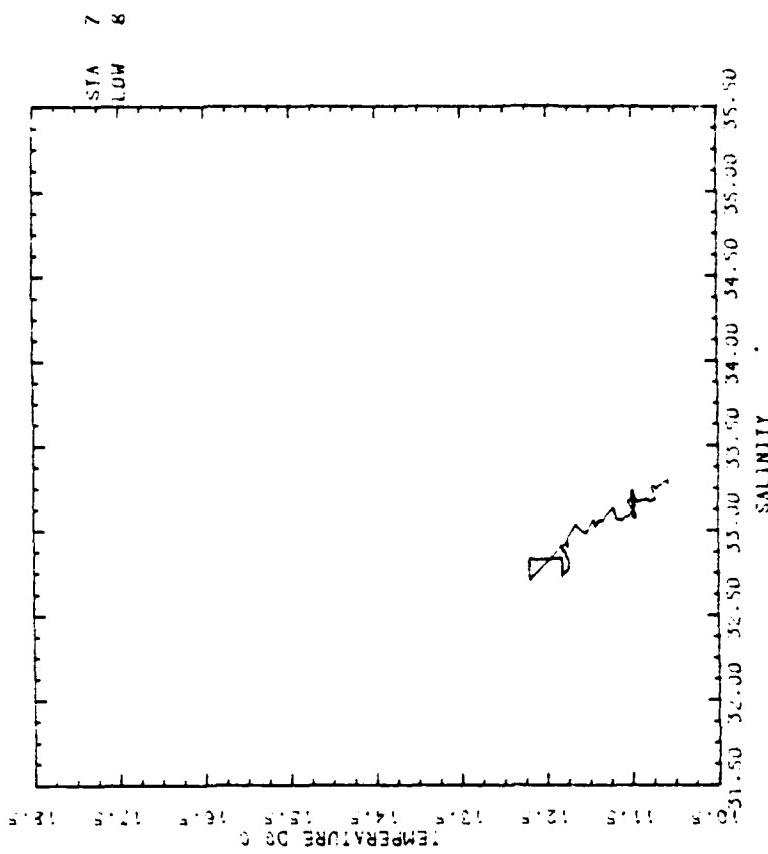


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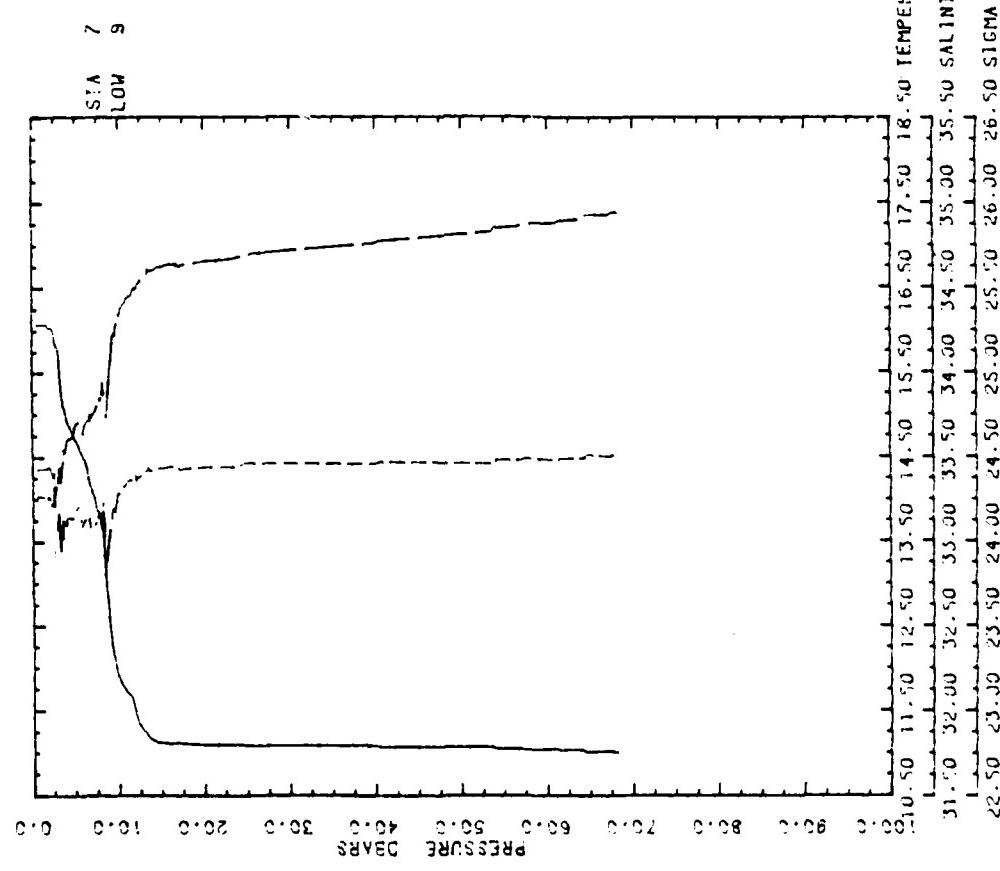
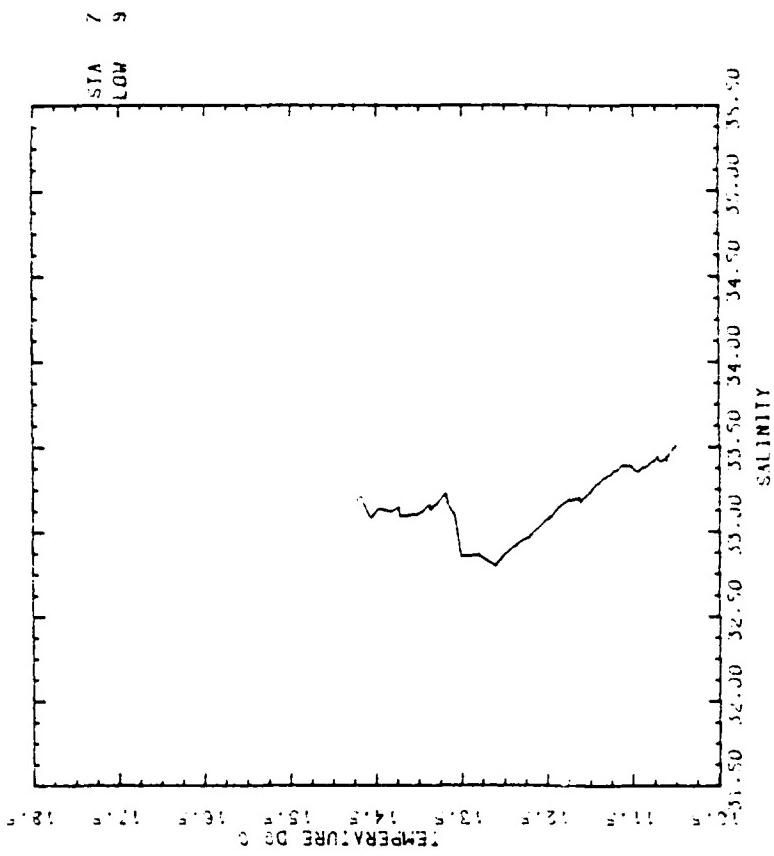


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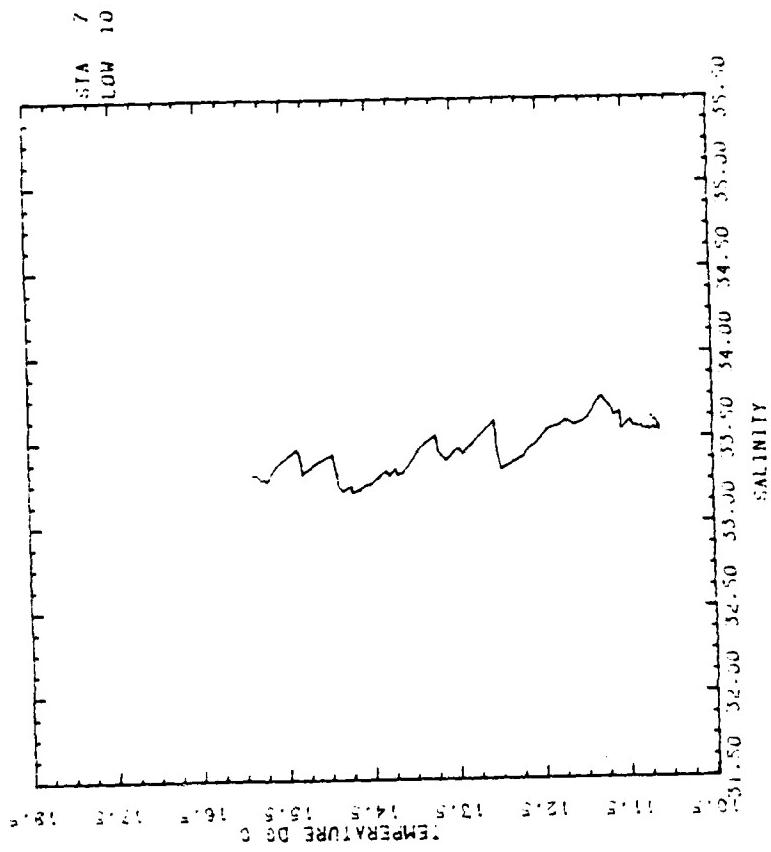
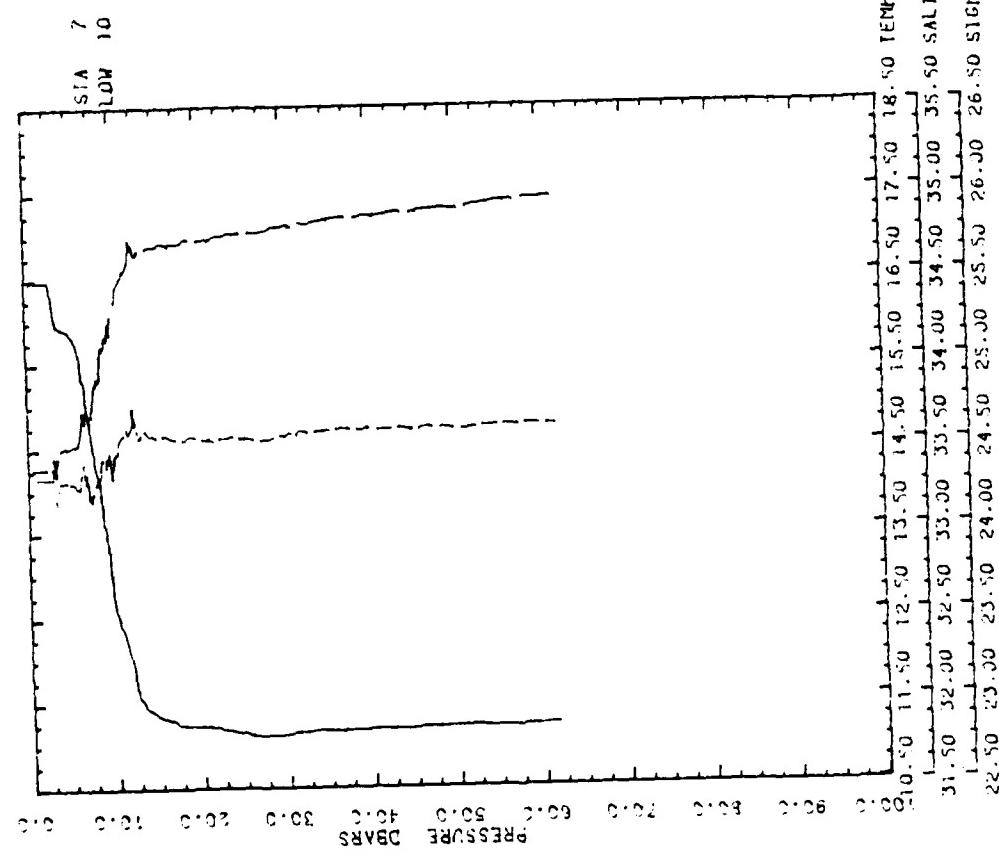


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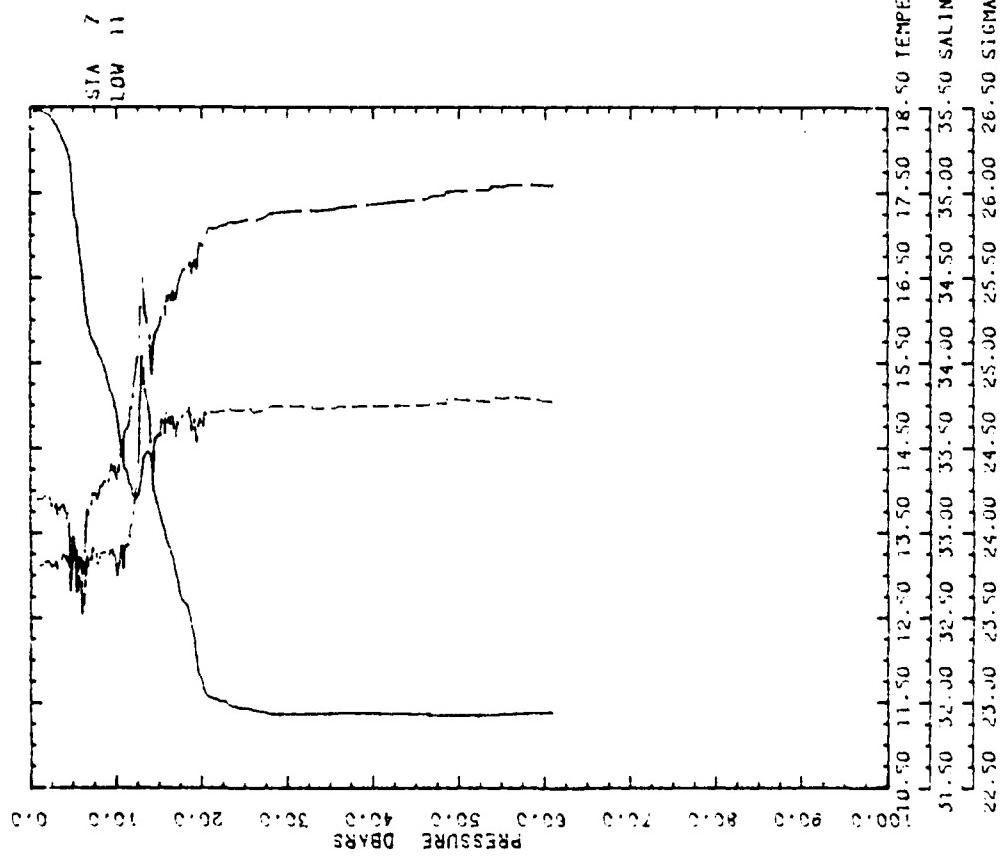
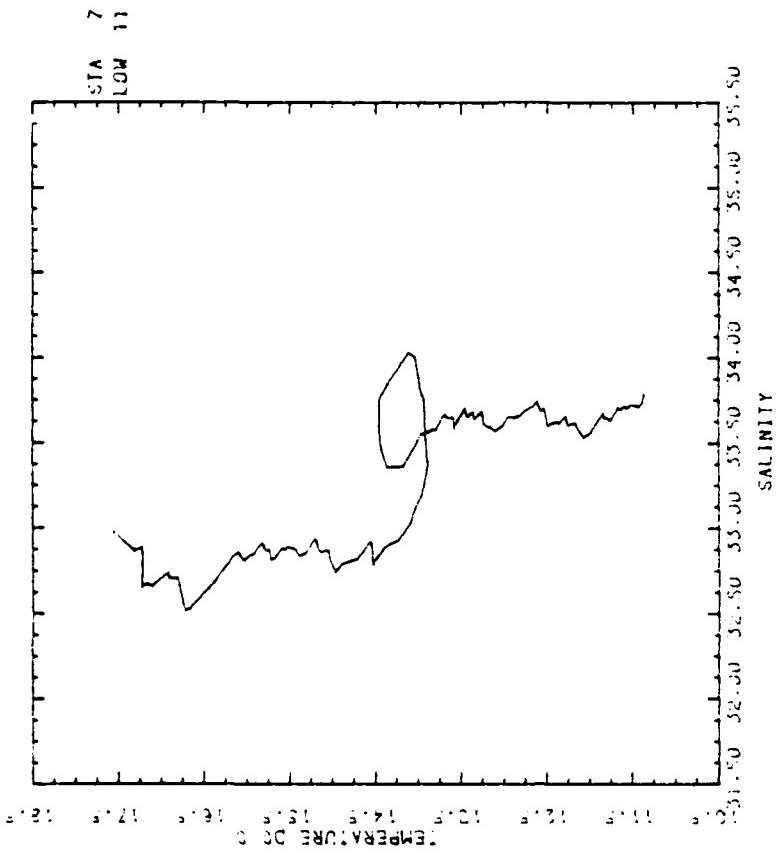


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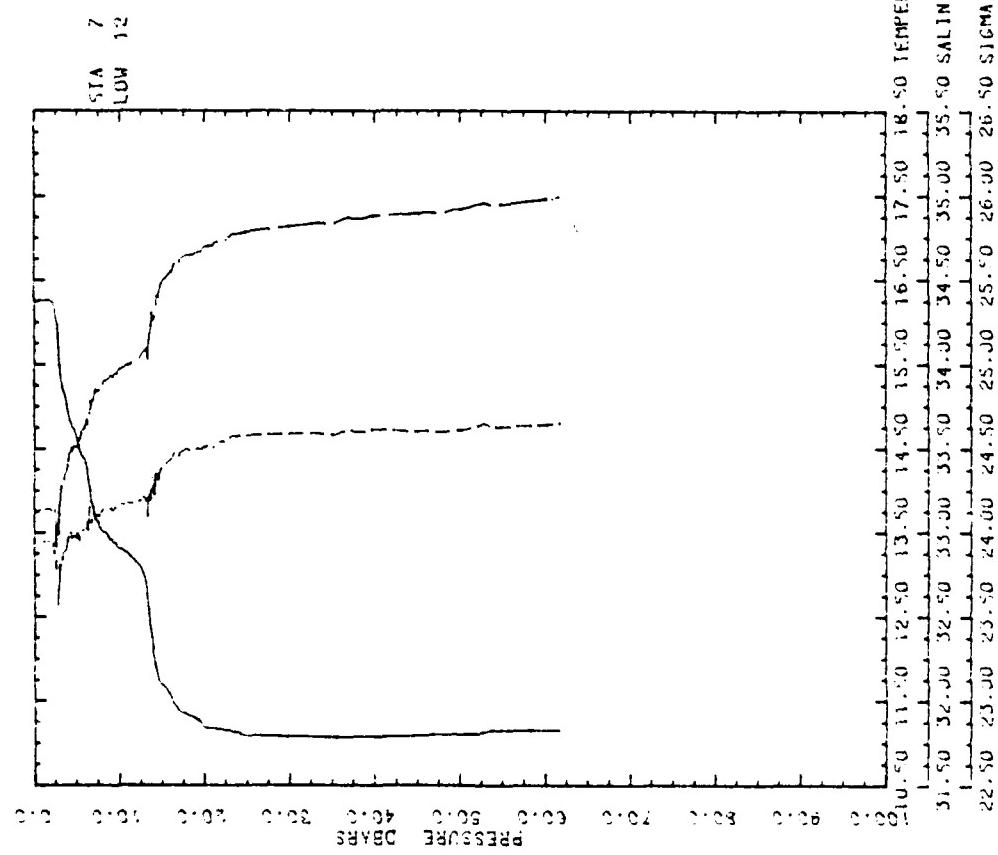
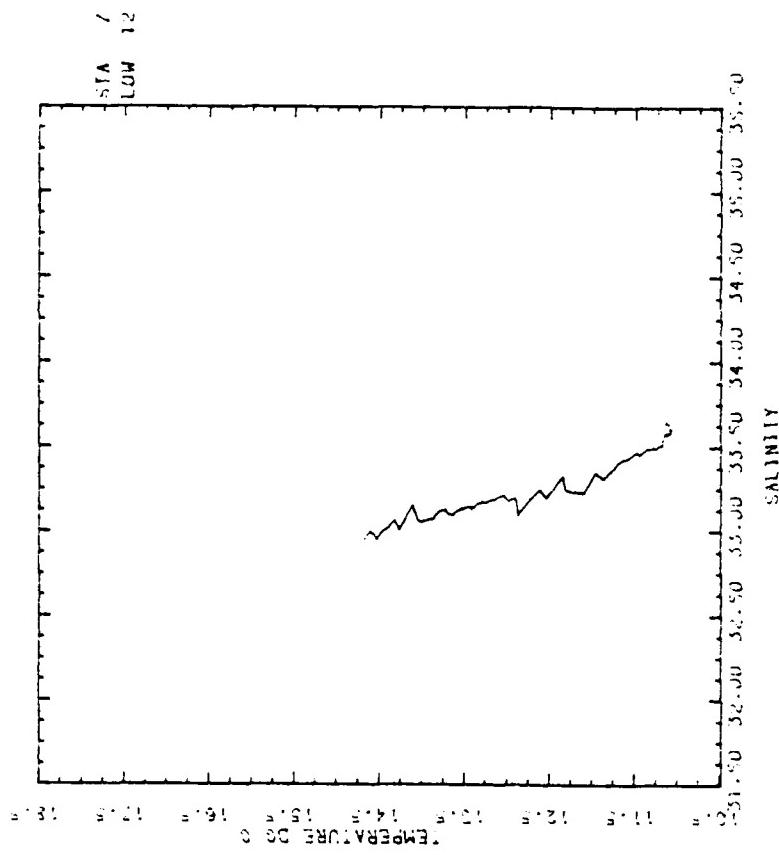


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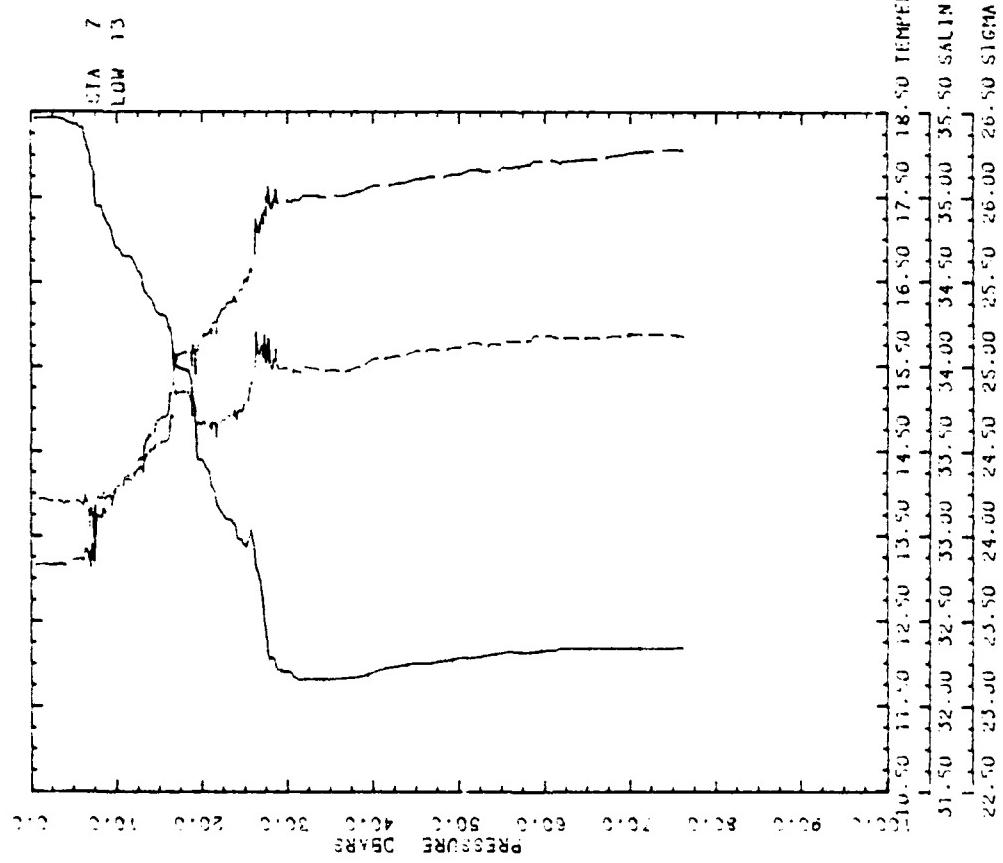
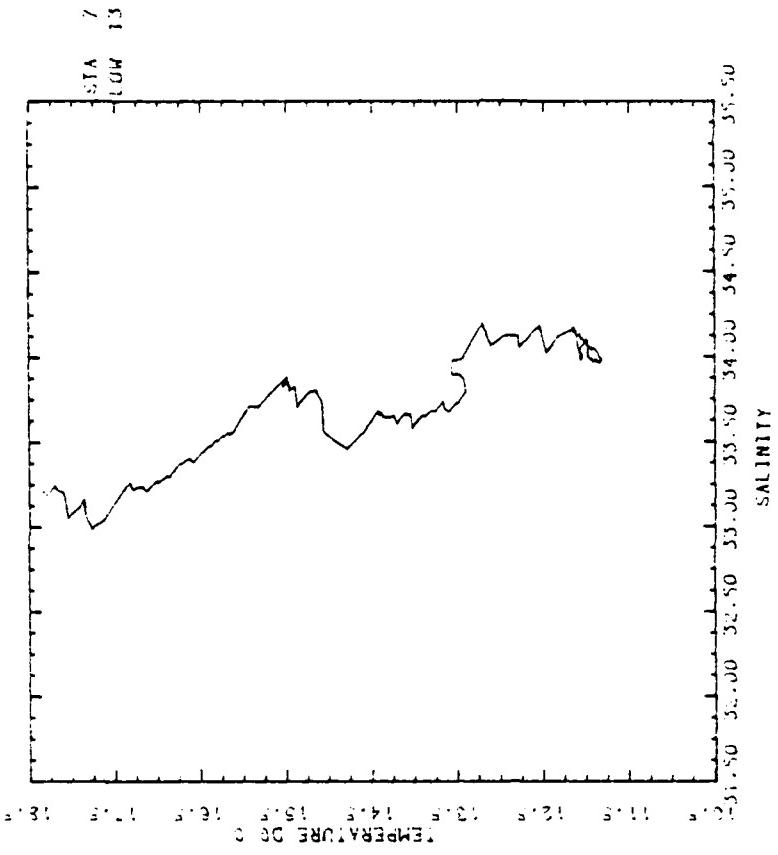


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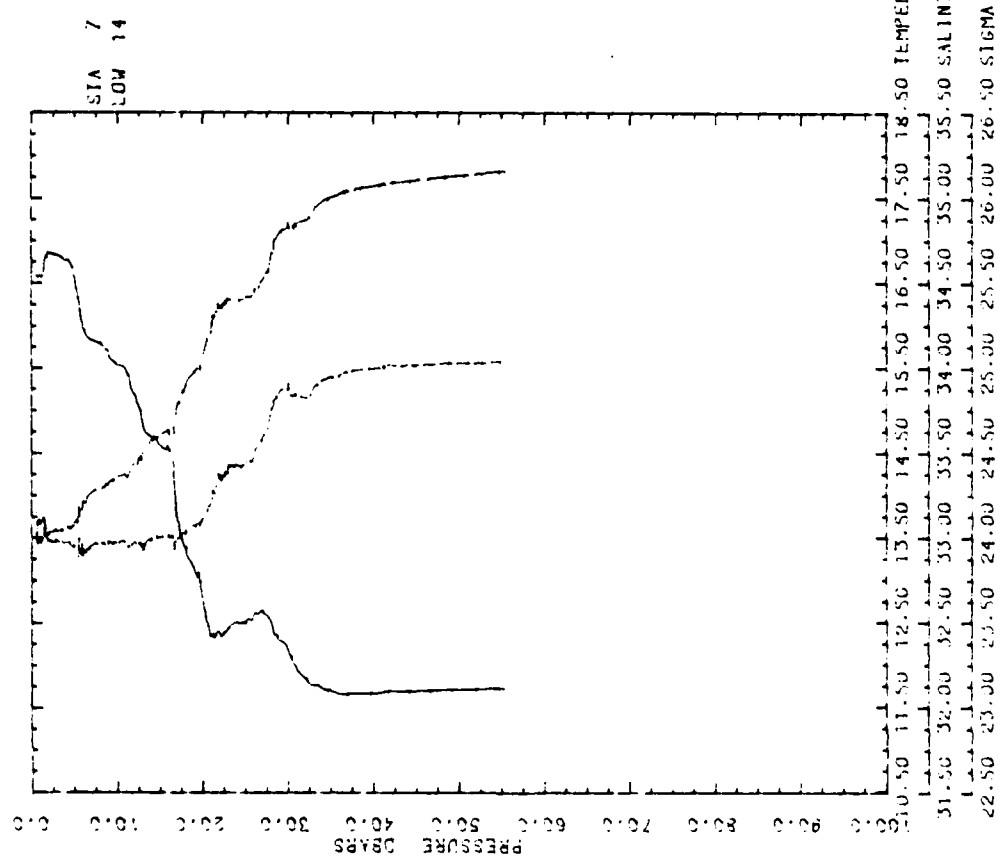
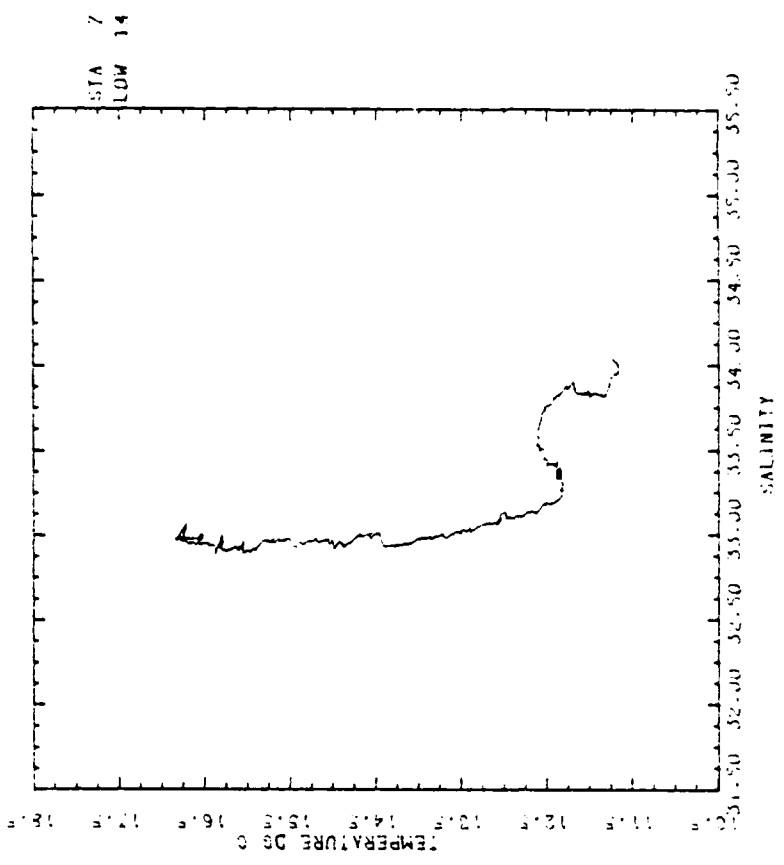


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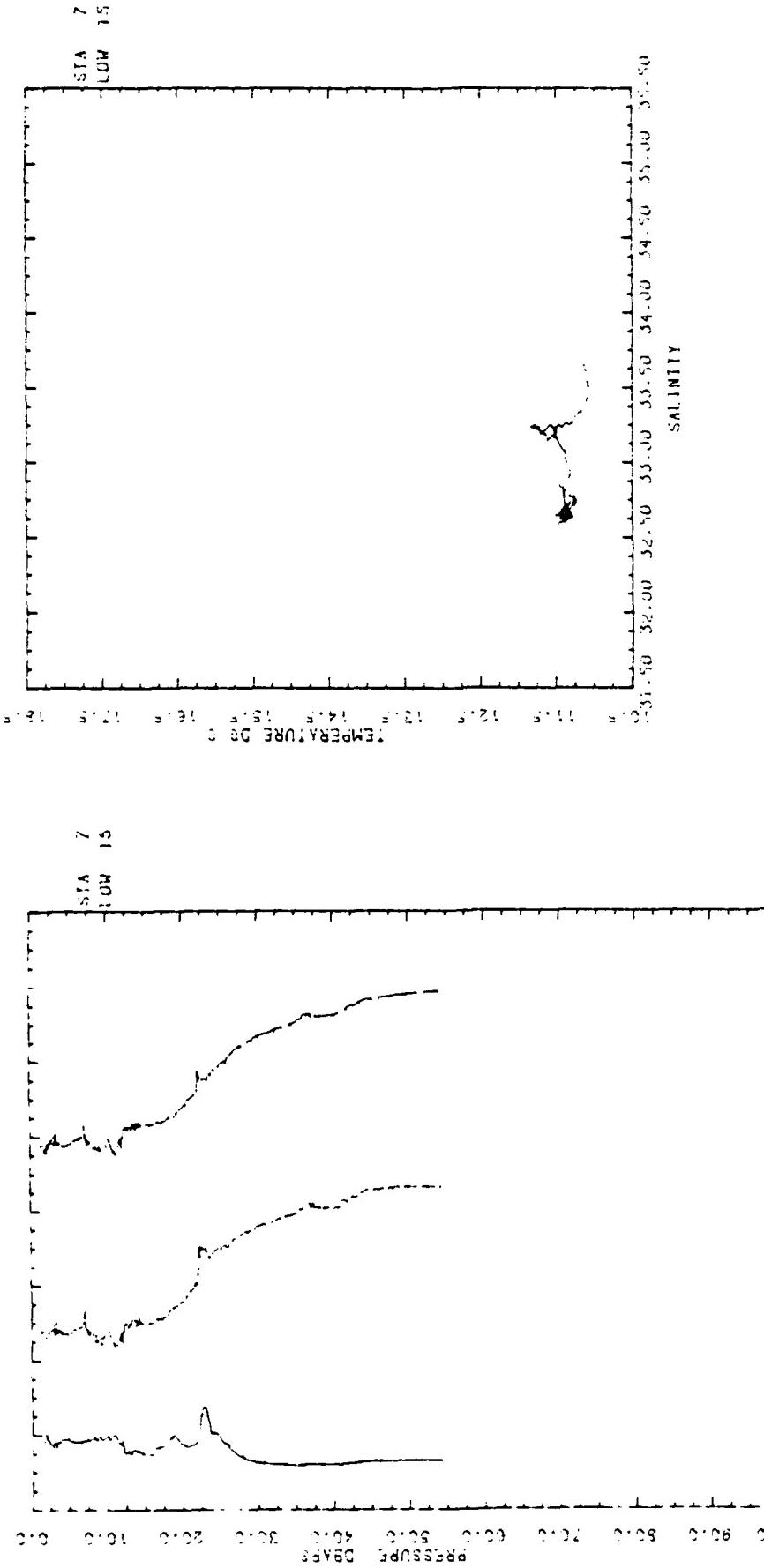


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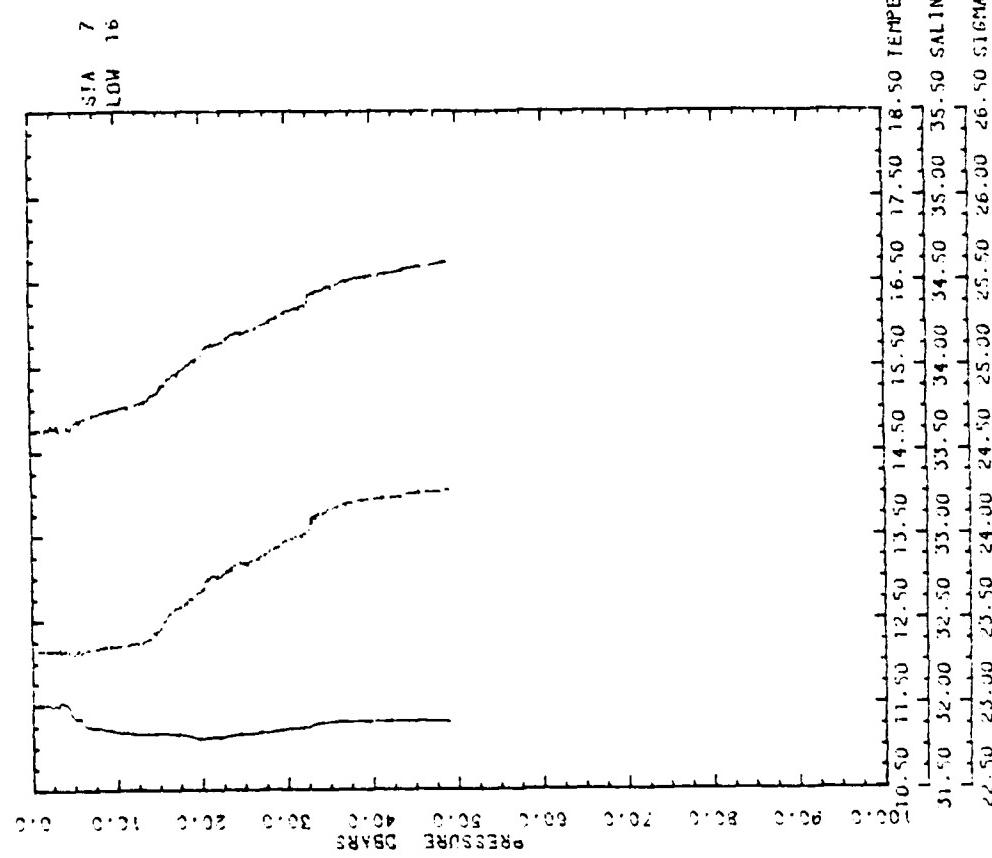
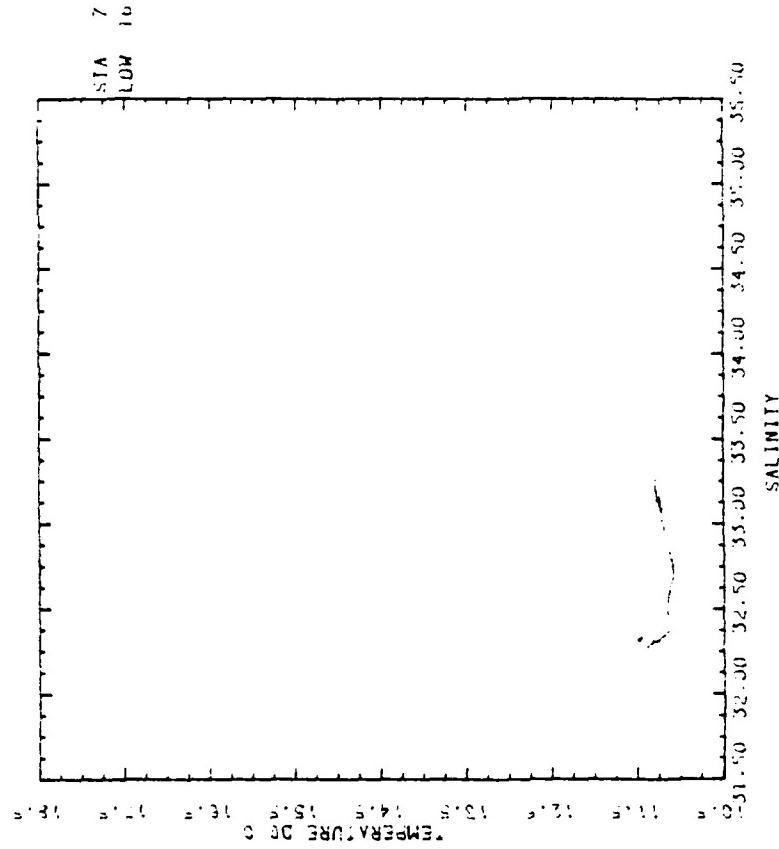


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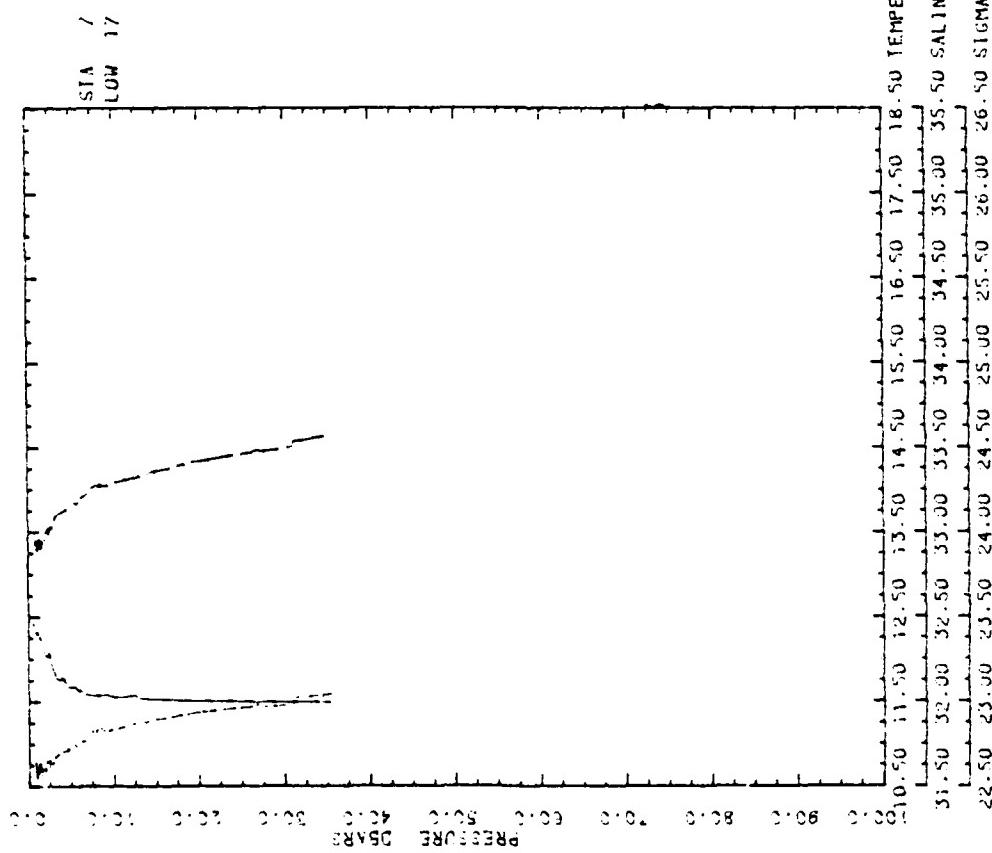
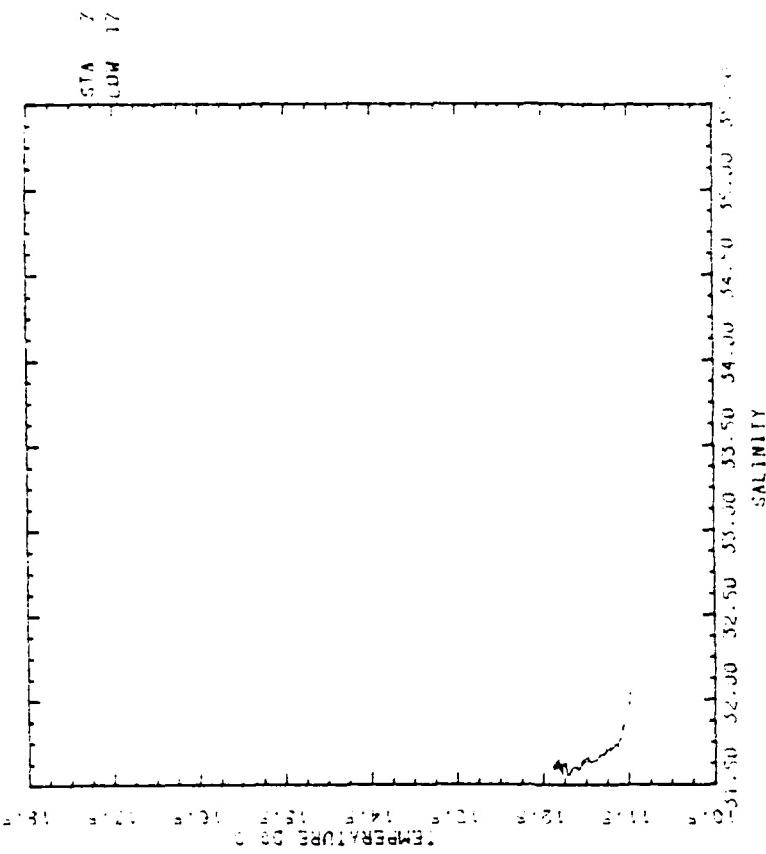


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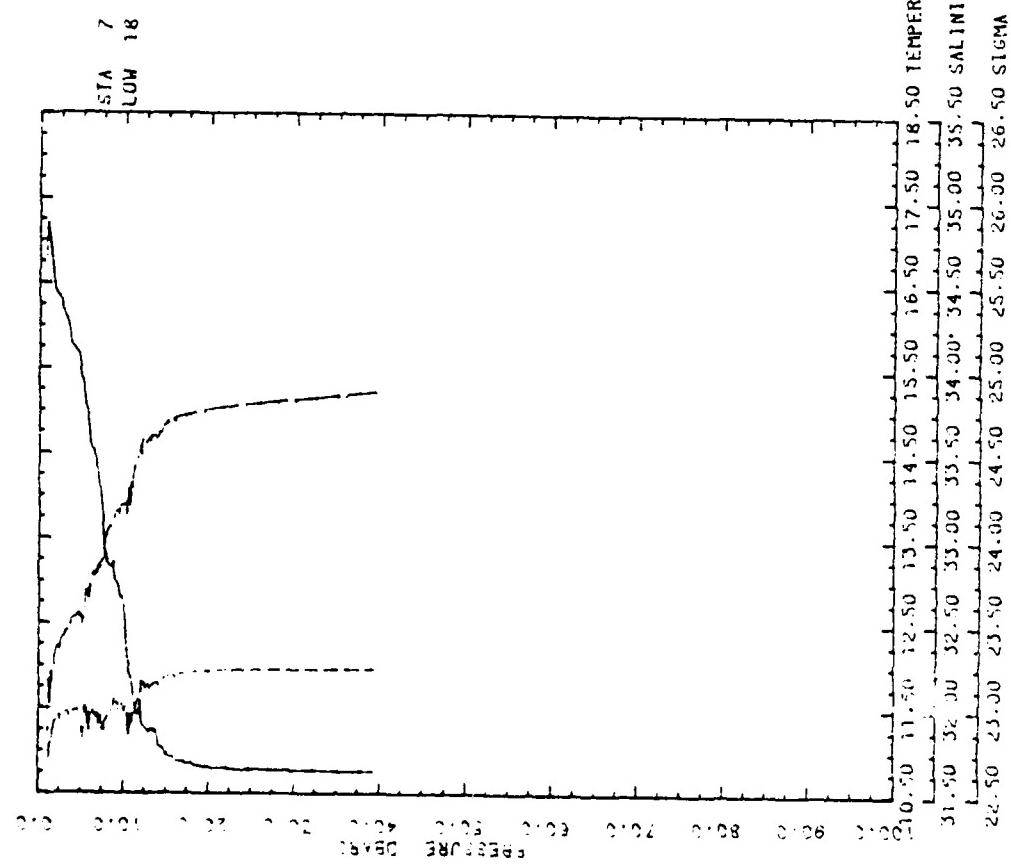
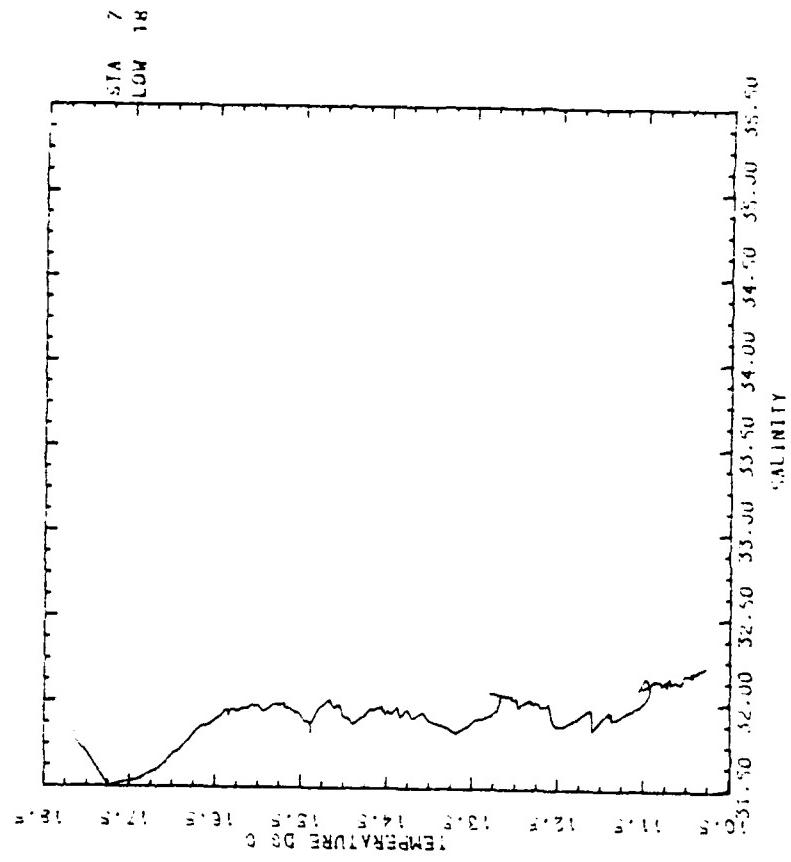


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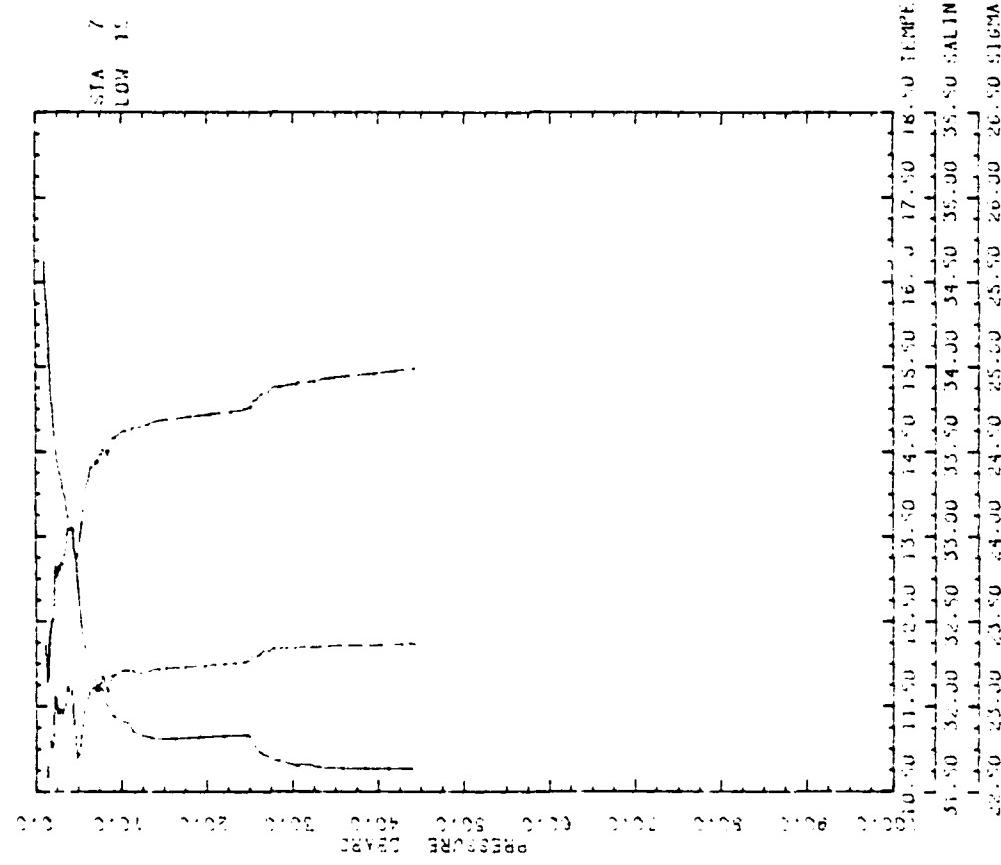
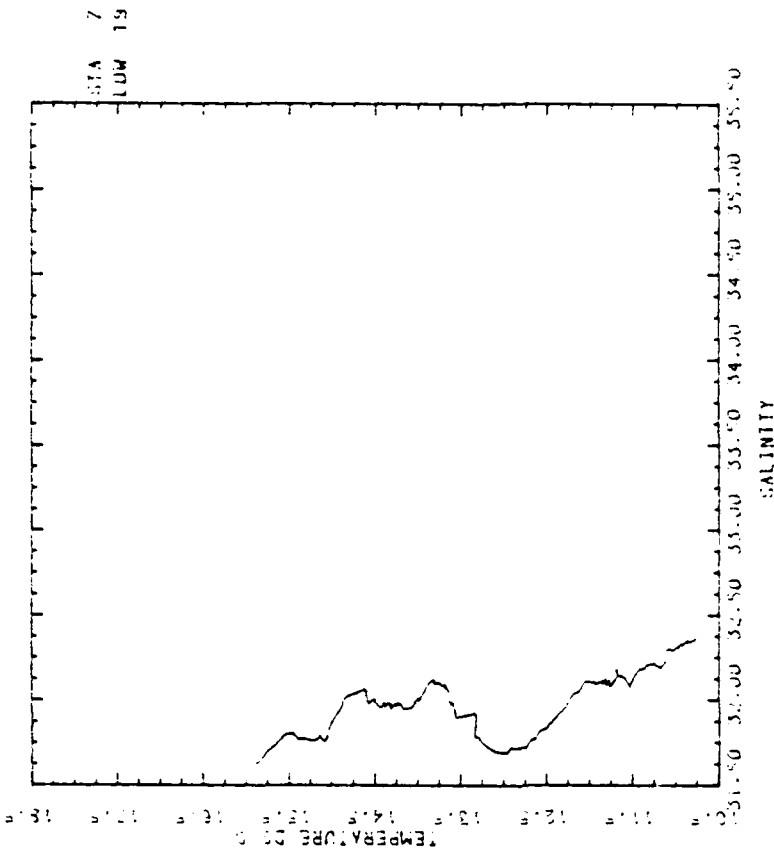


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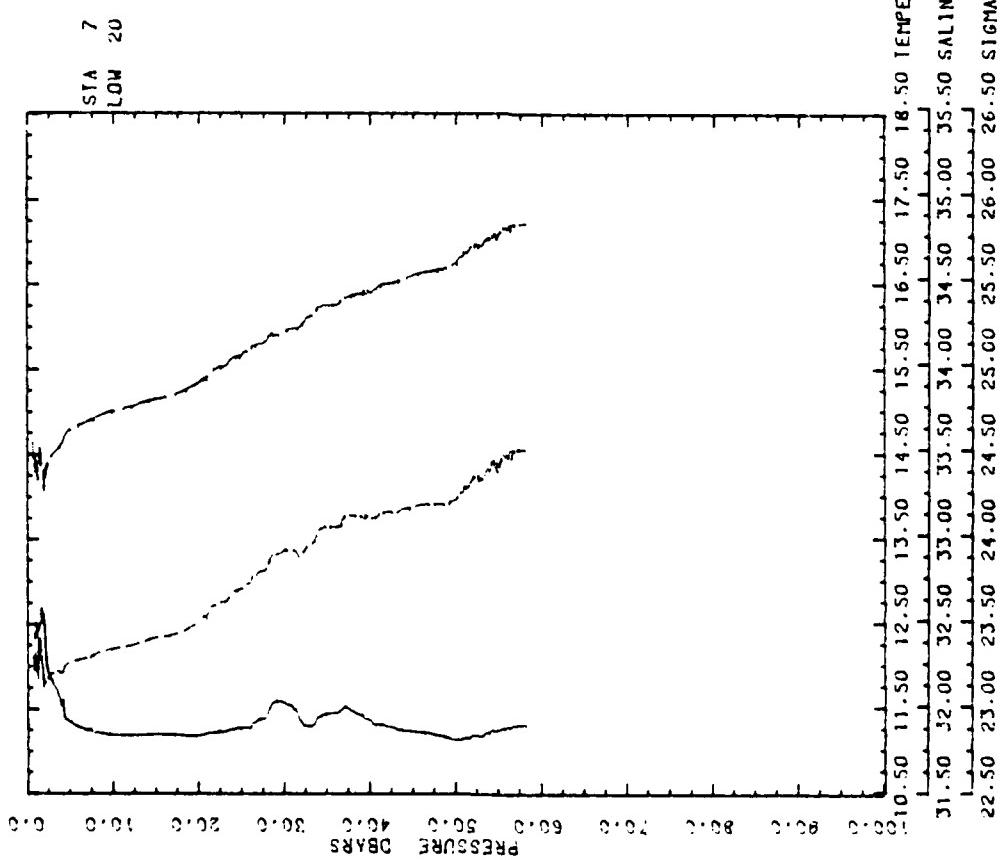
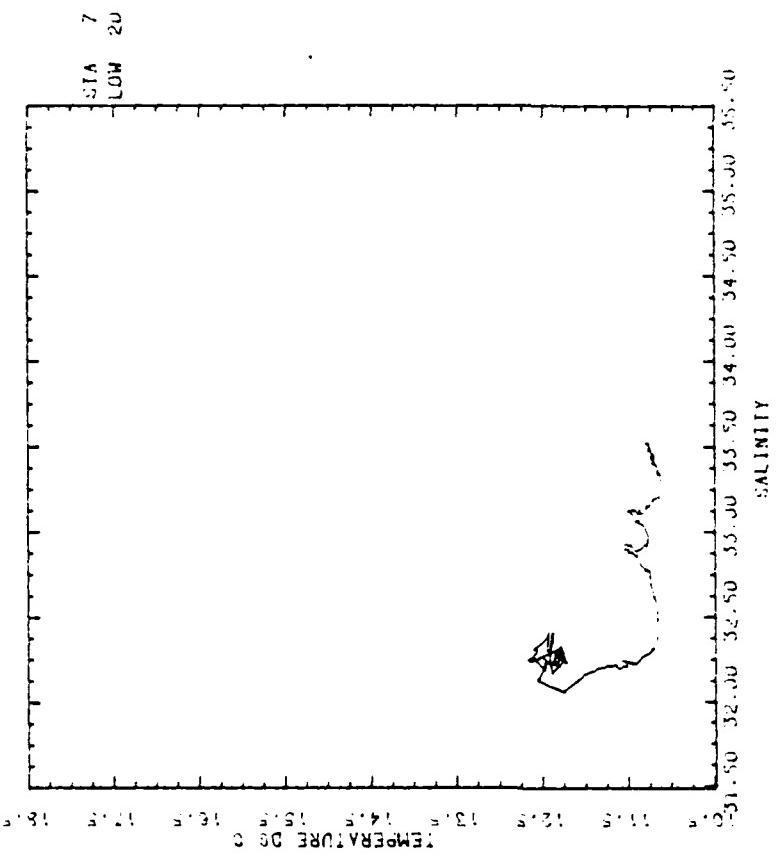


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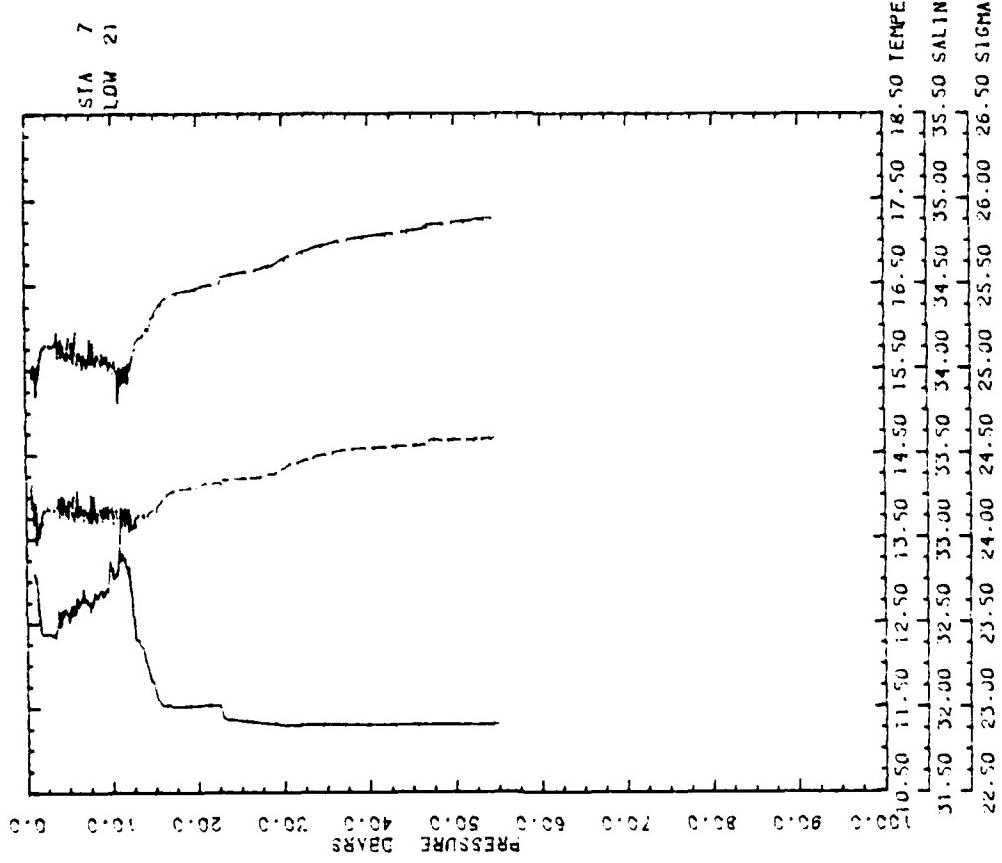
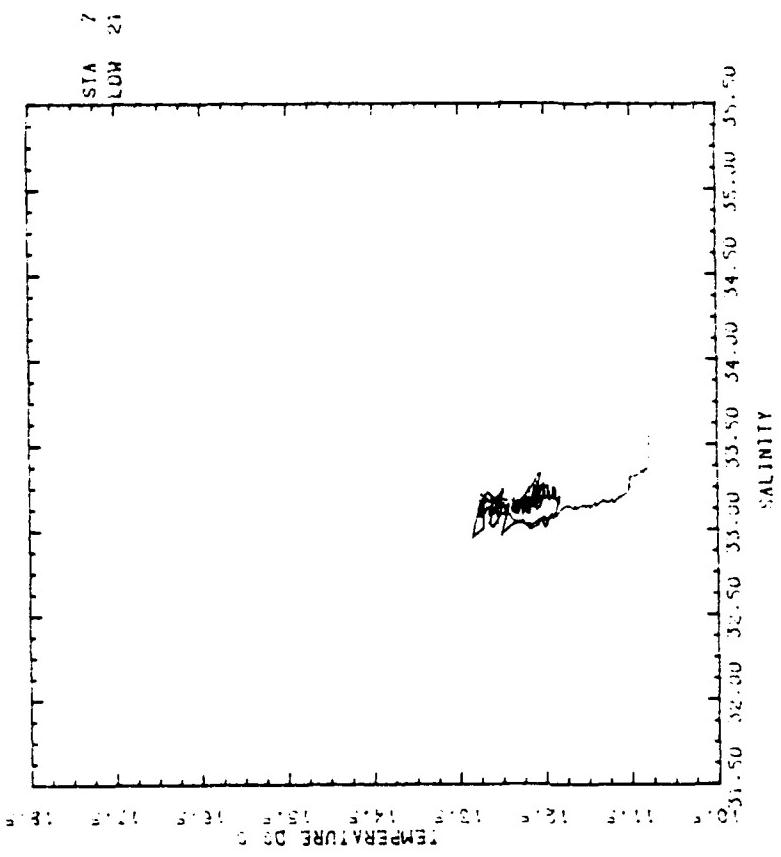


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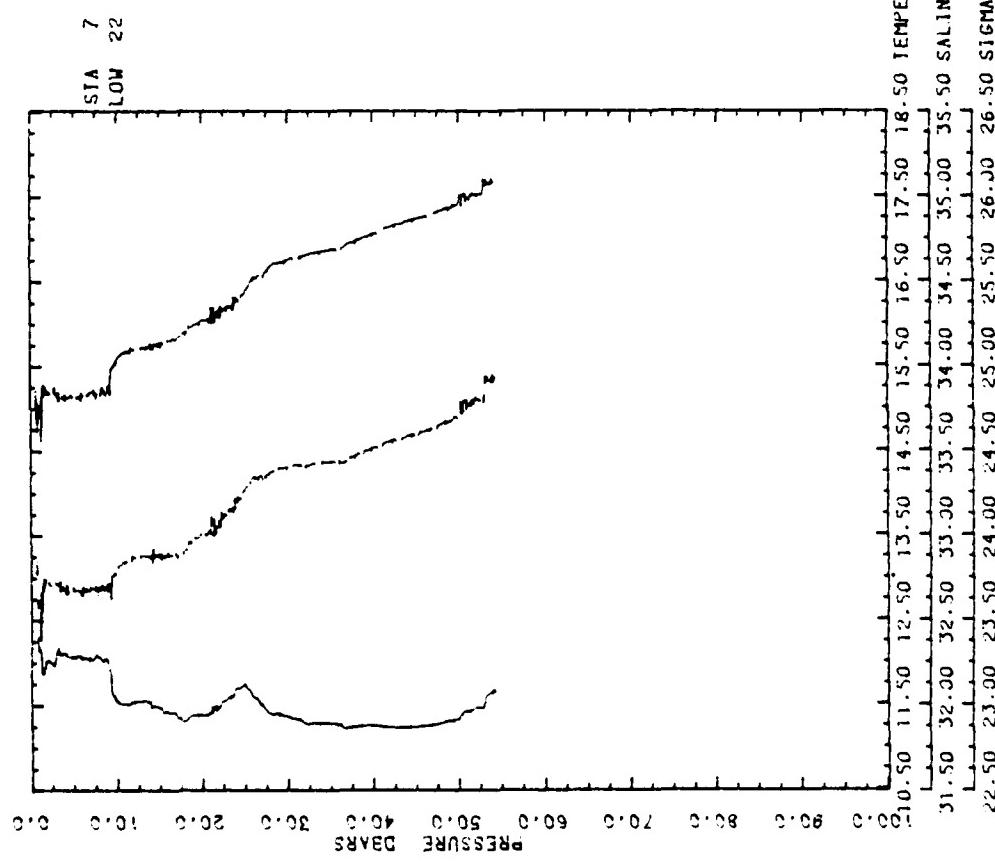
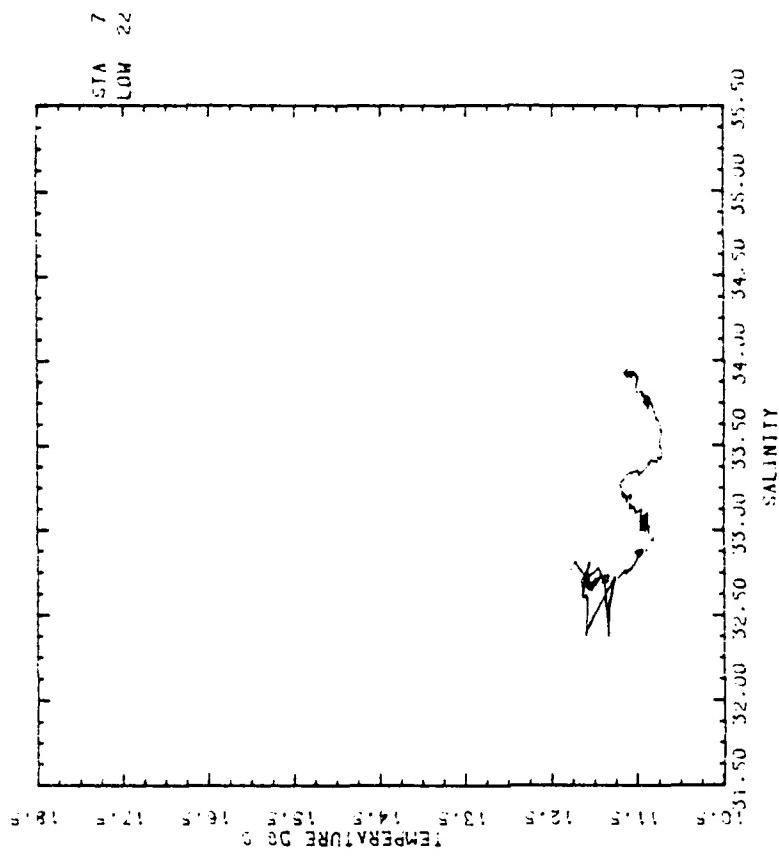


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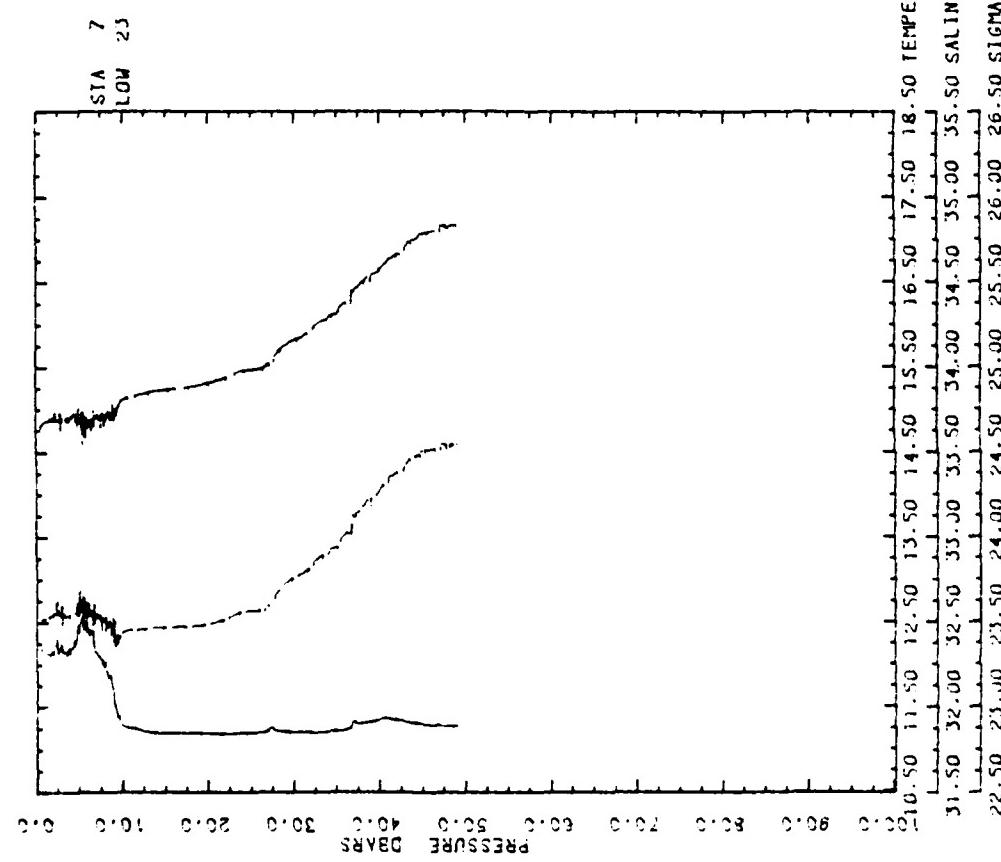
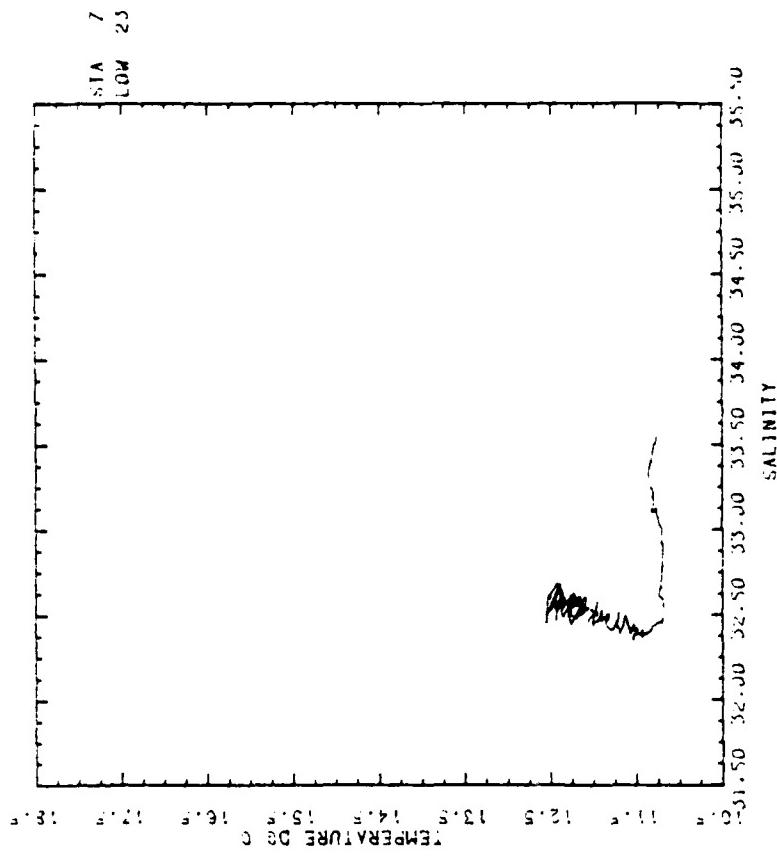


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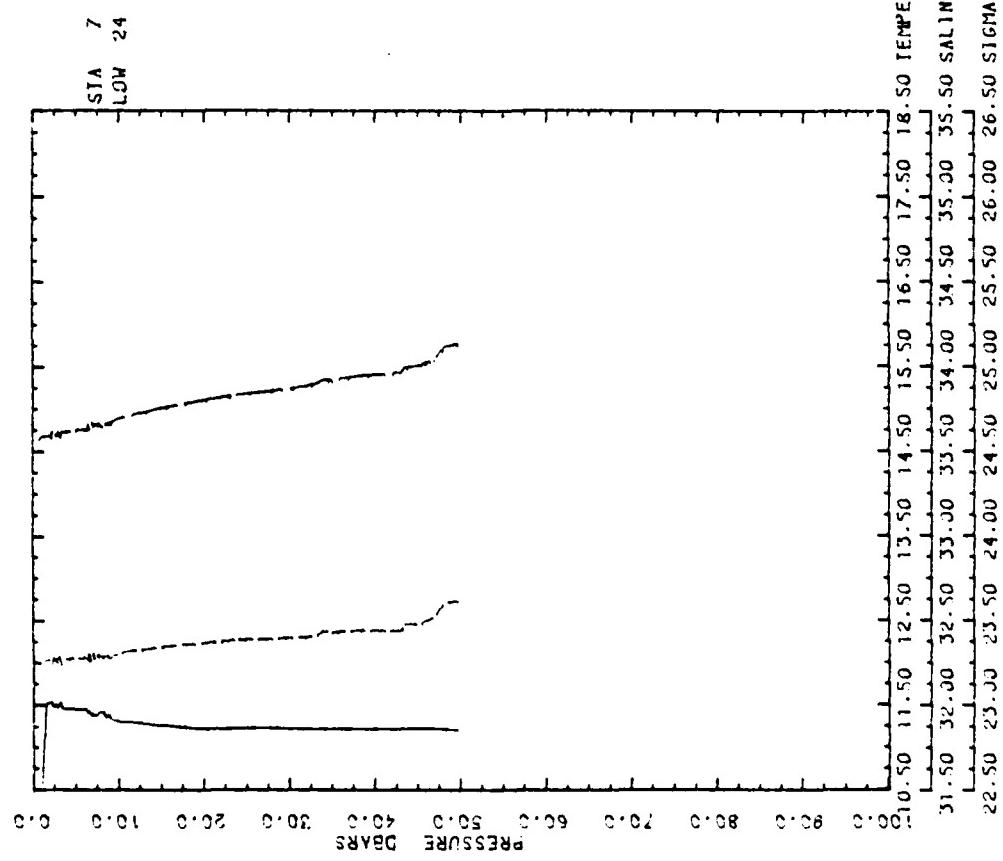
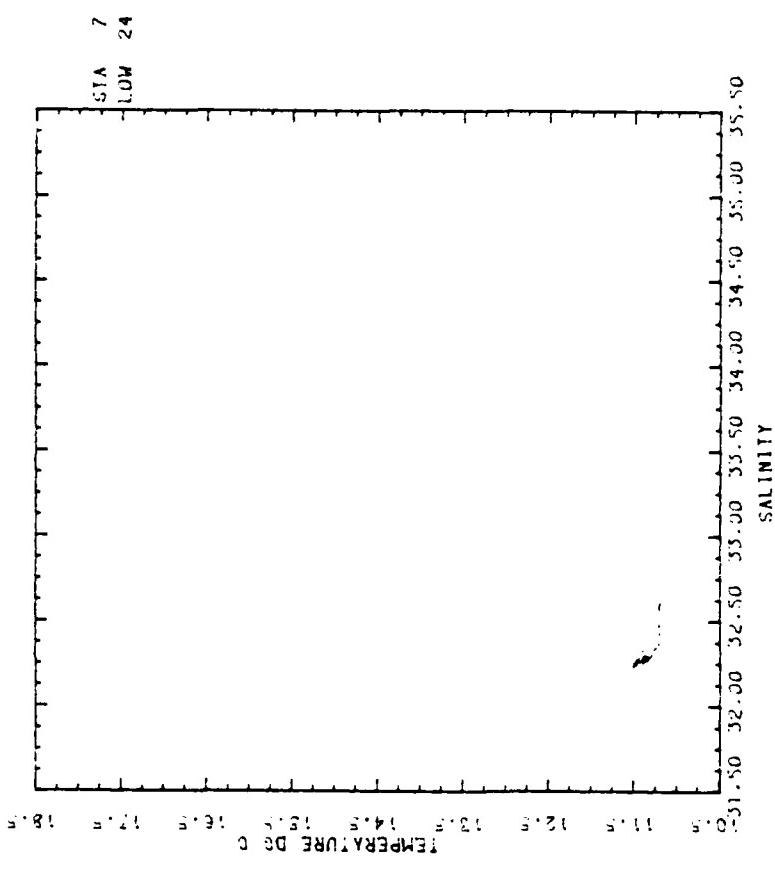


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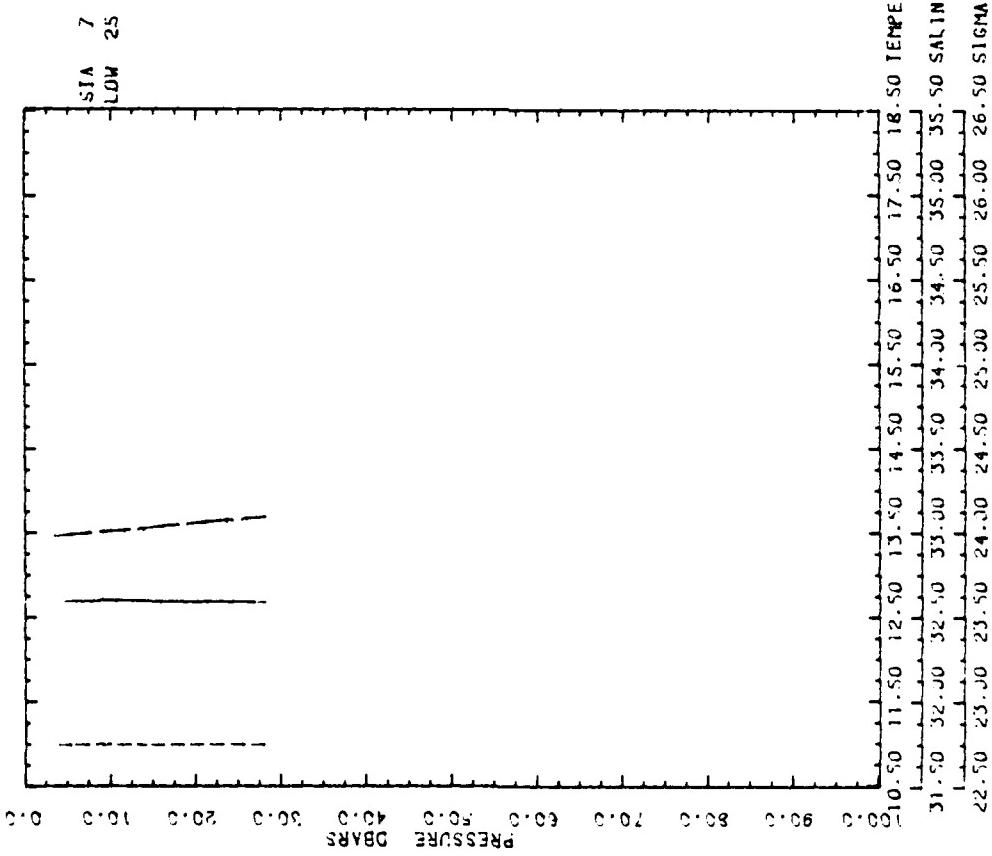
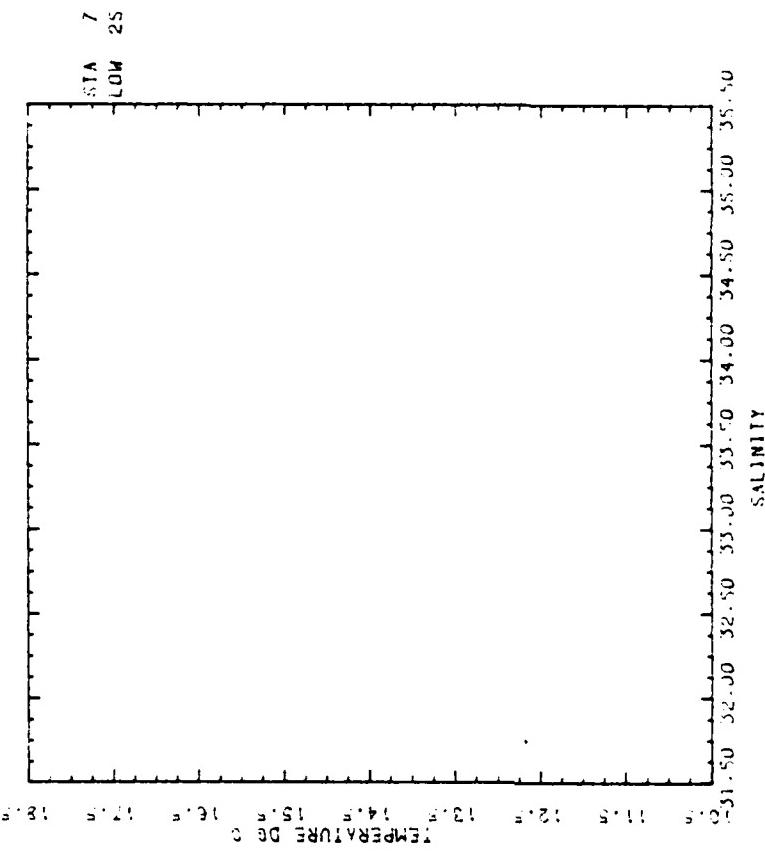


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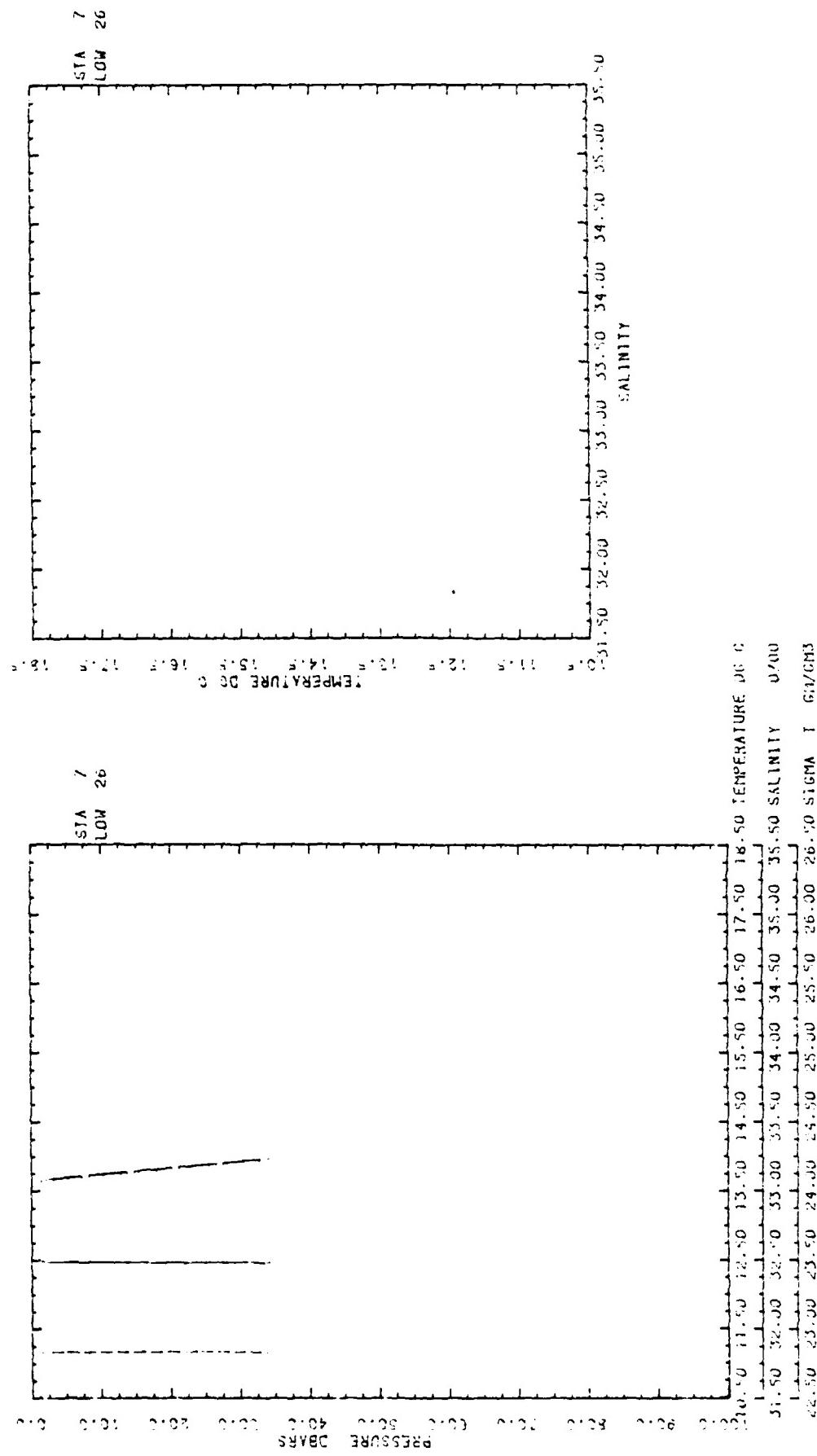


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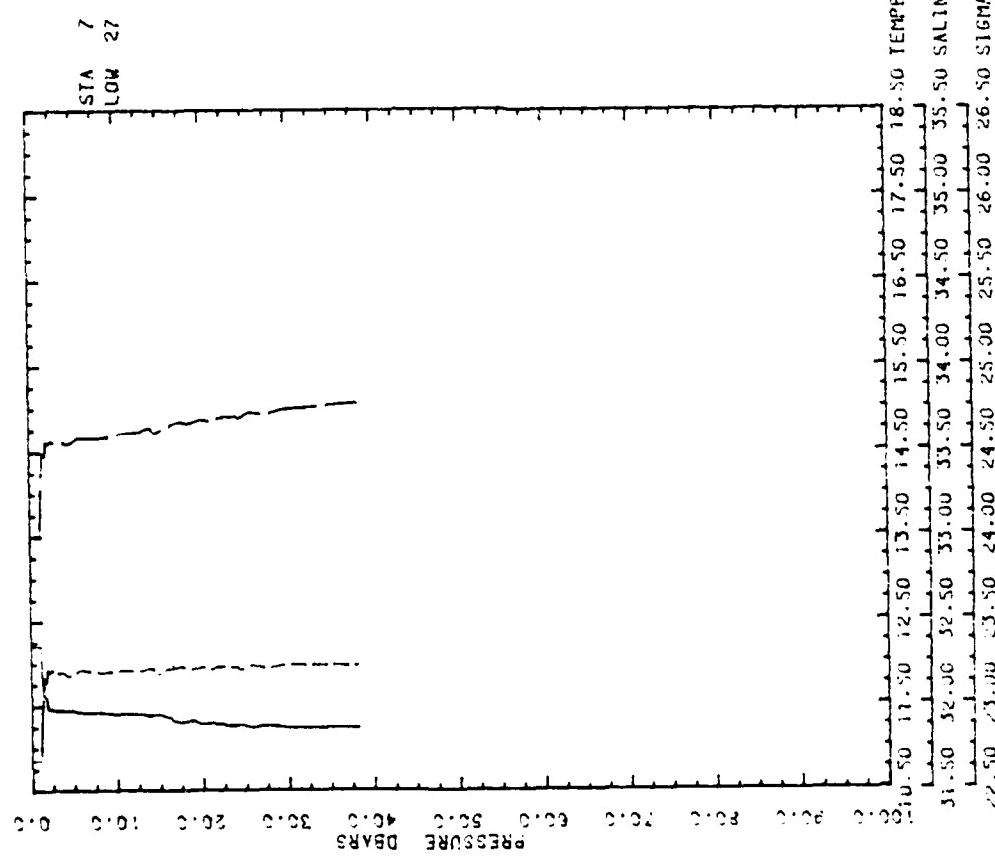
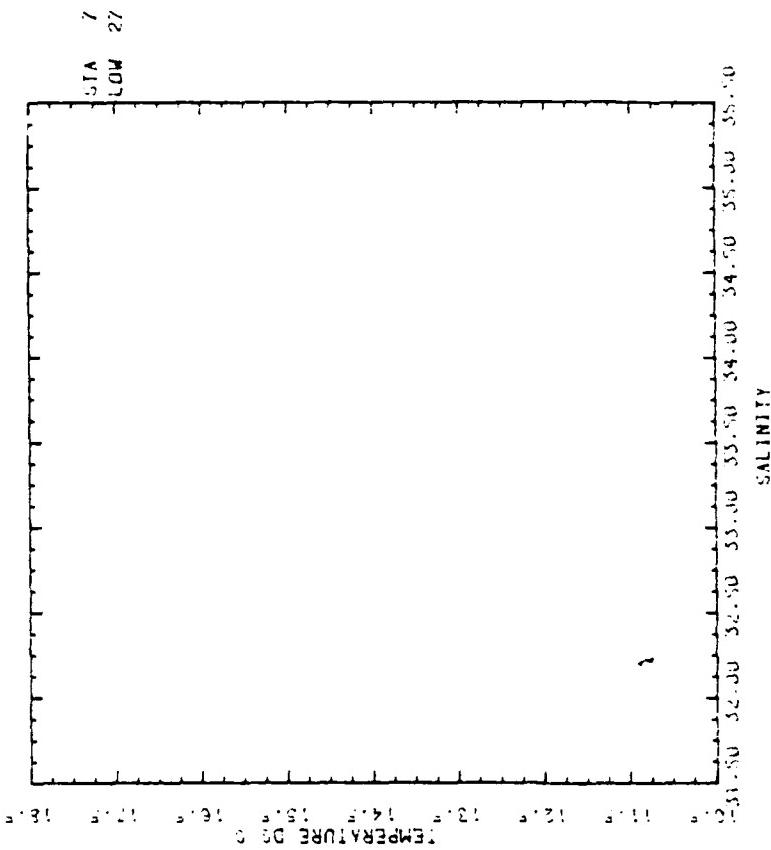


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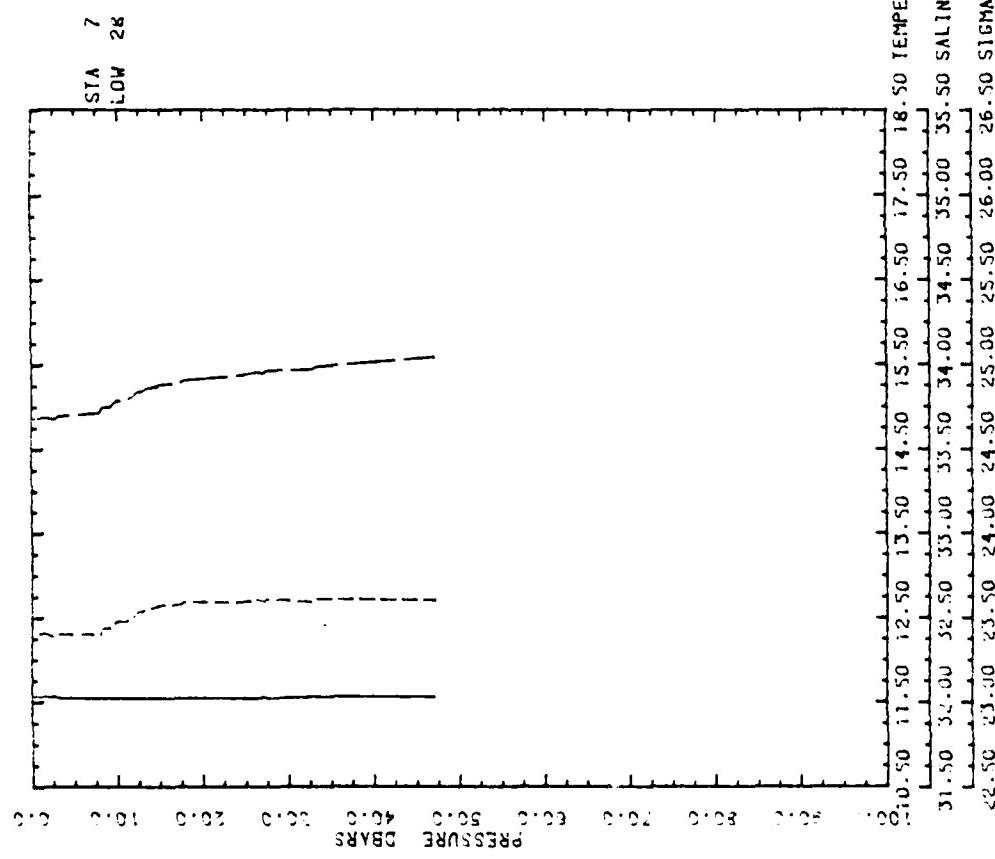
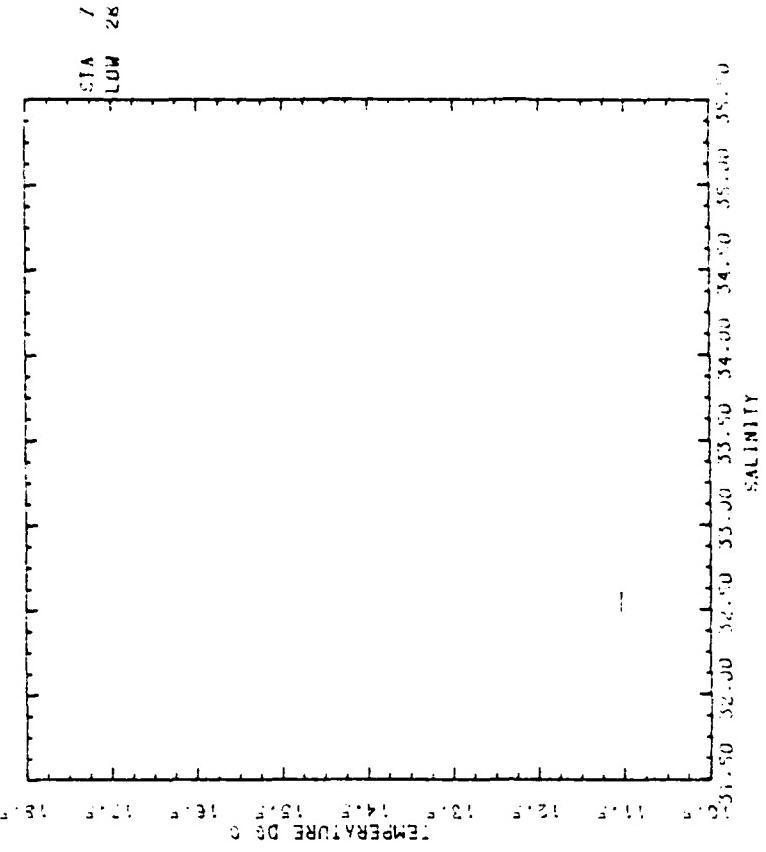


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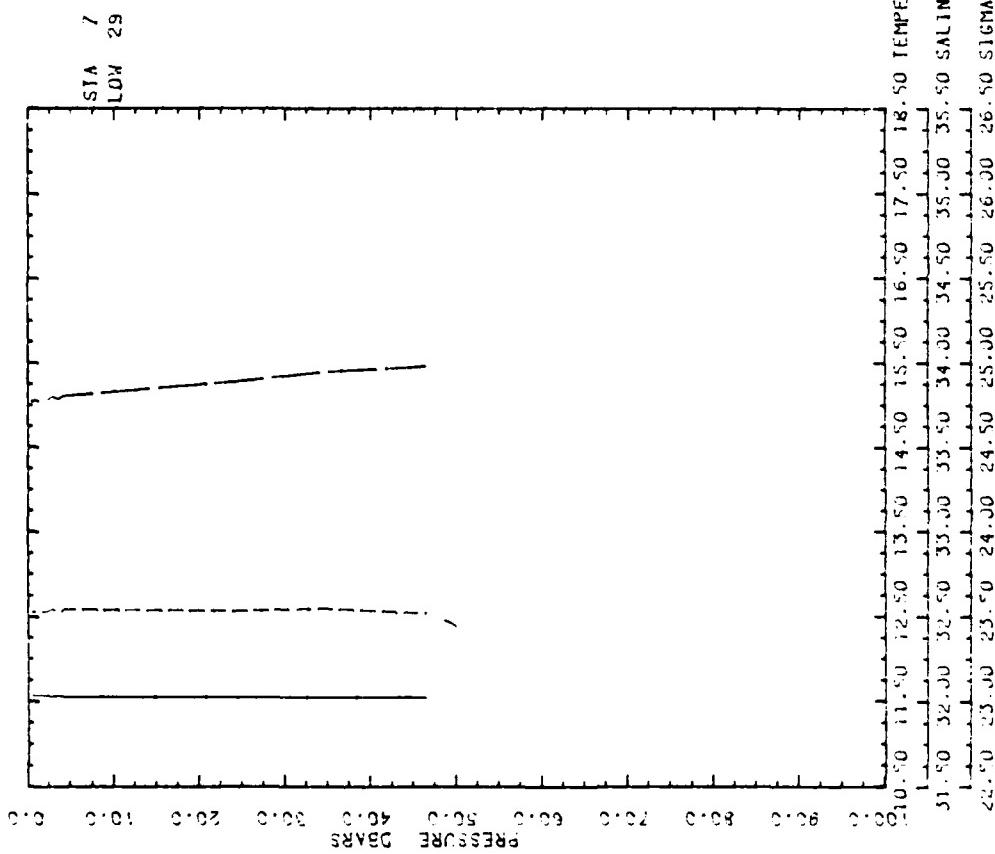
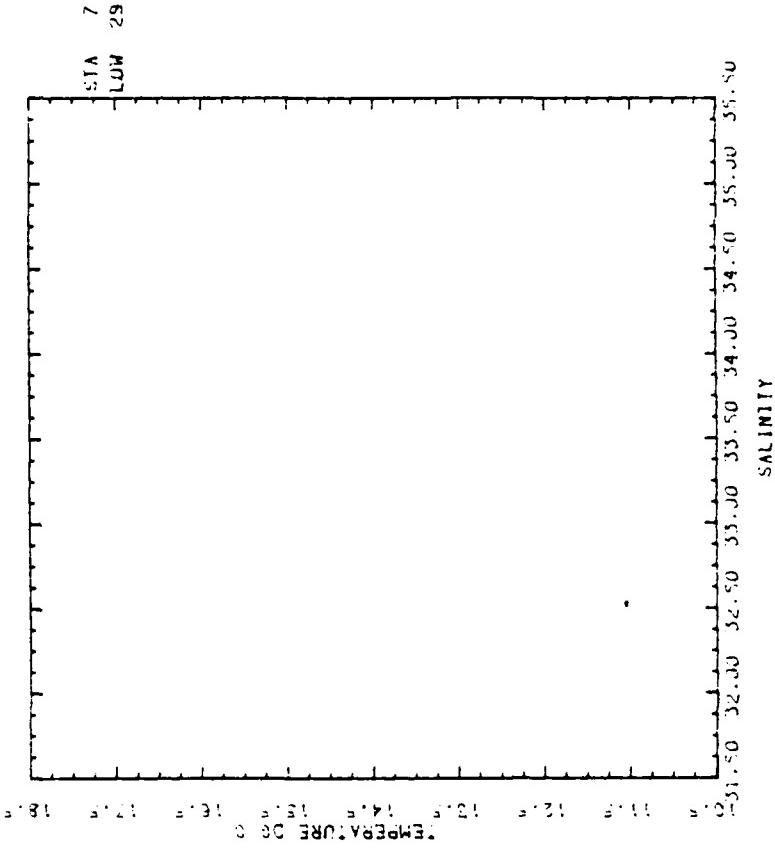


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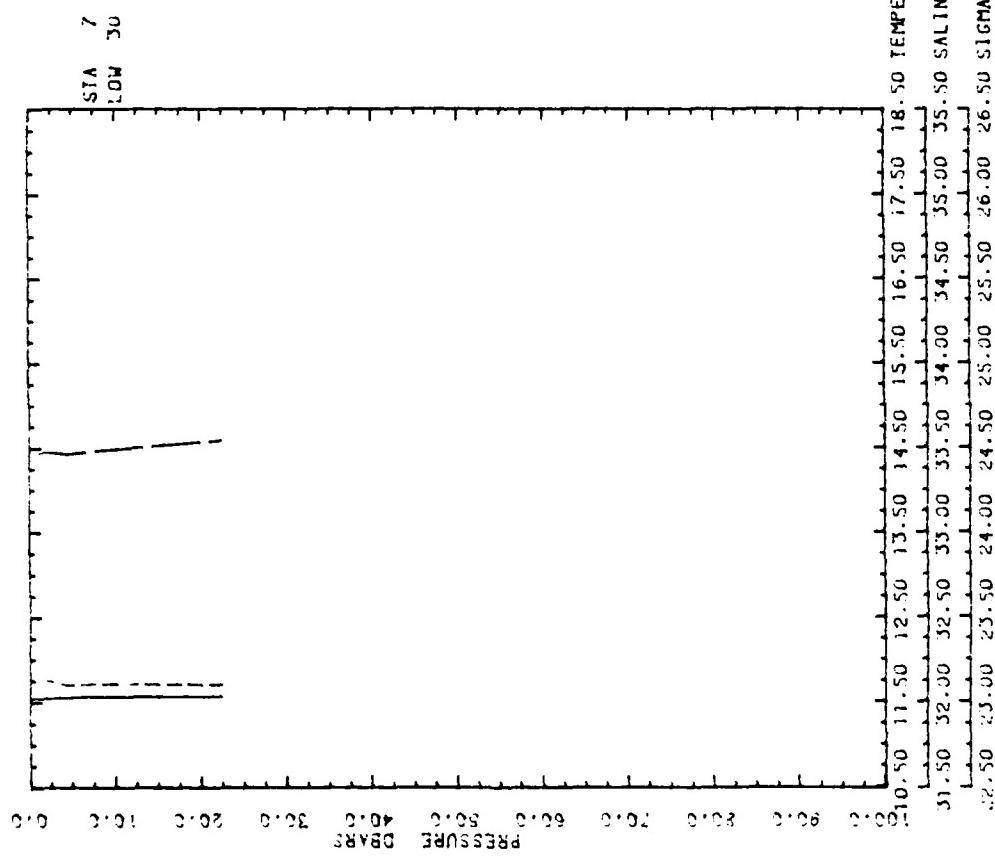
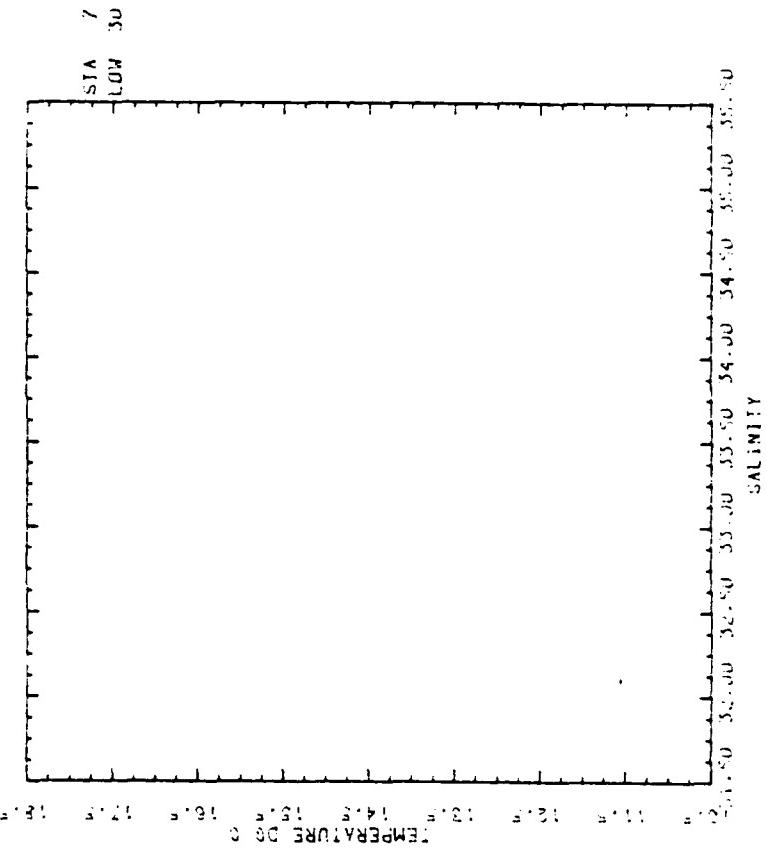


Figure A.30

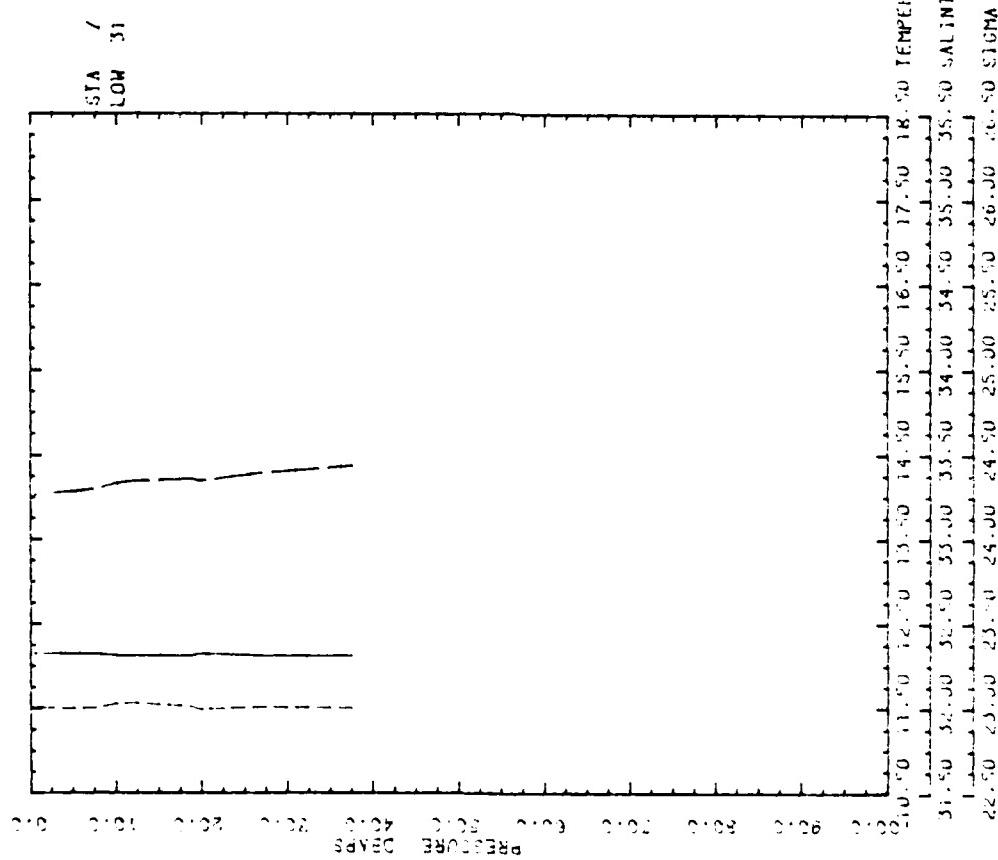
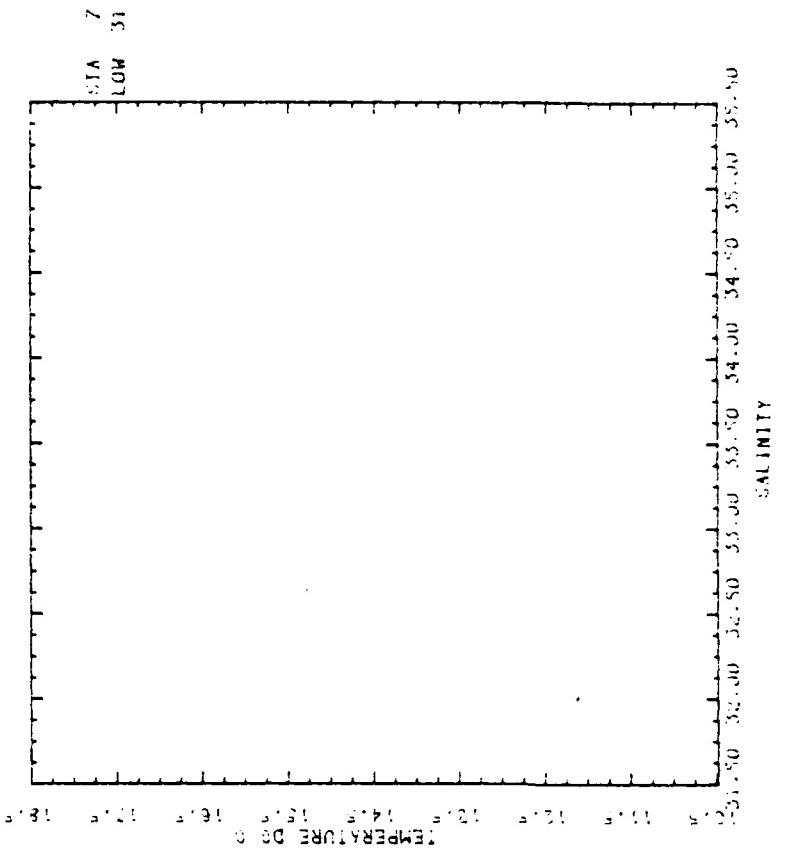


Figure A.31

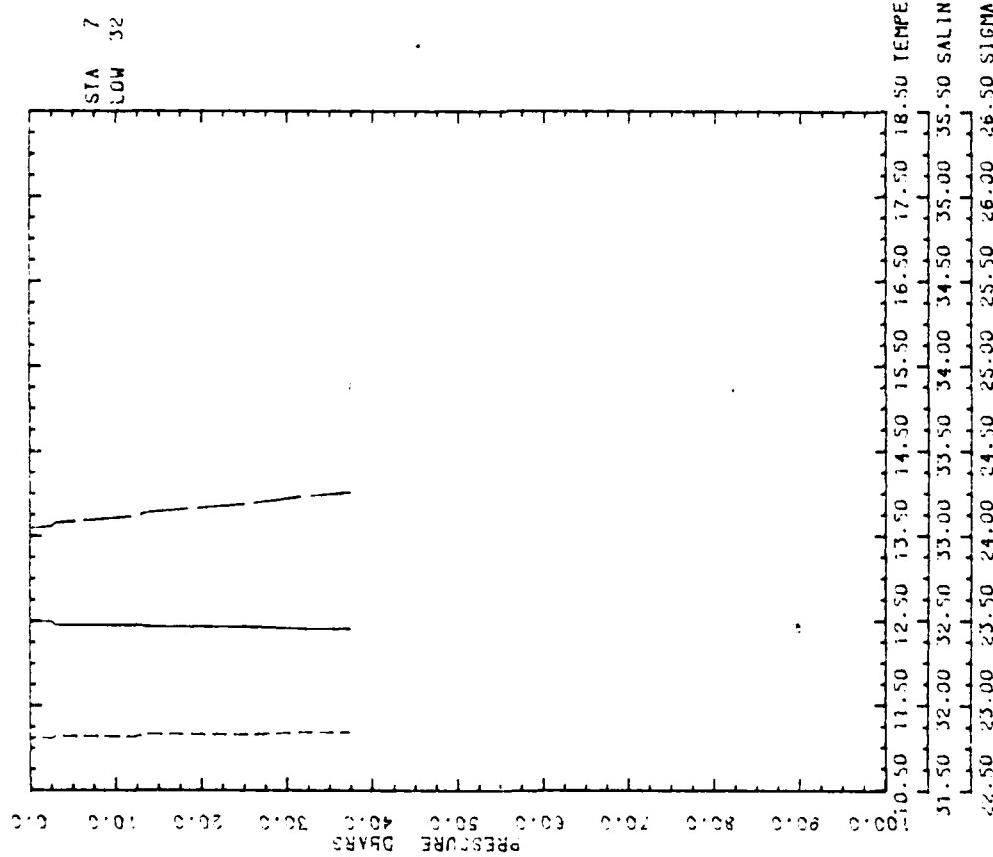
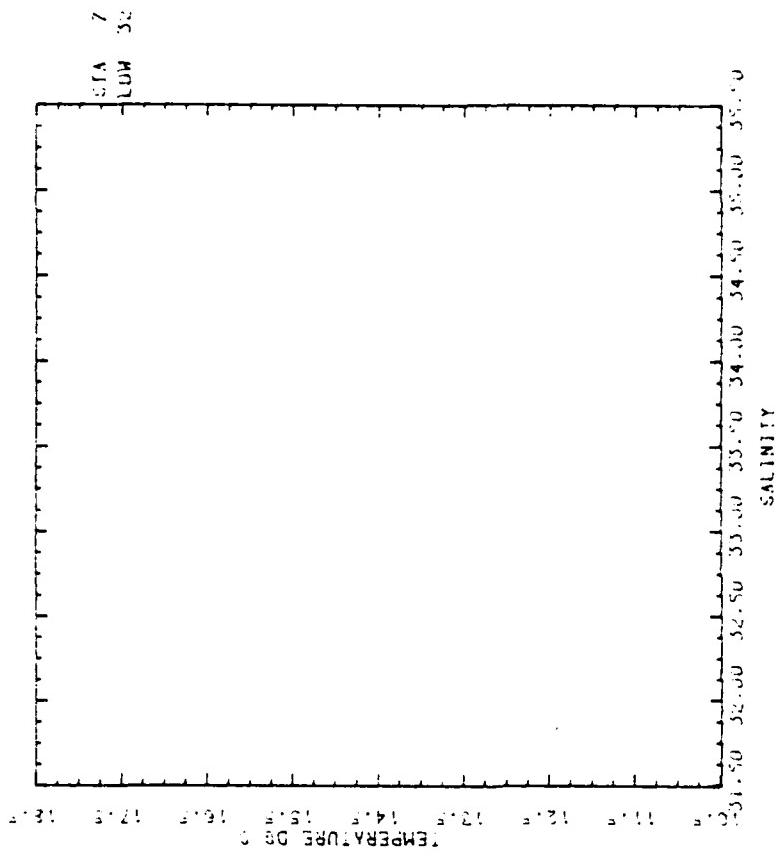


Figure A.32

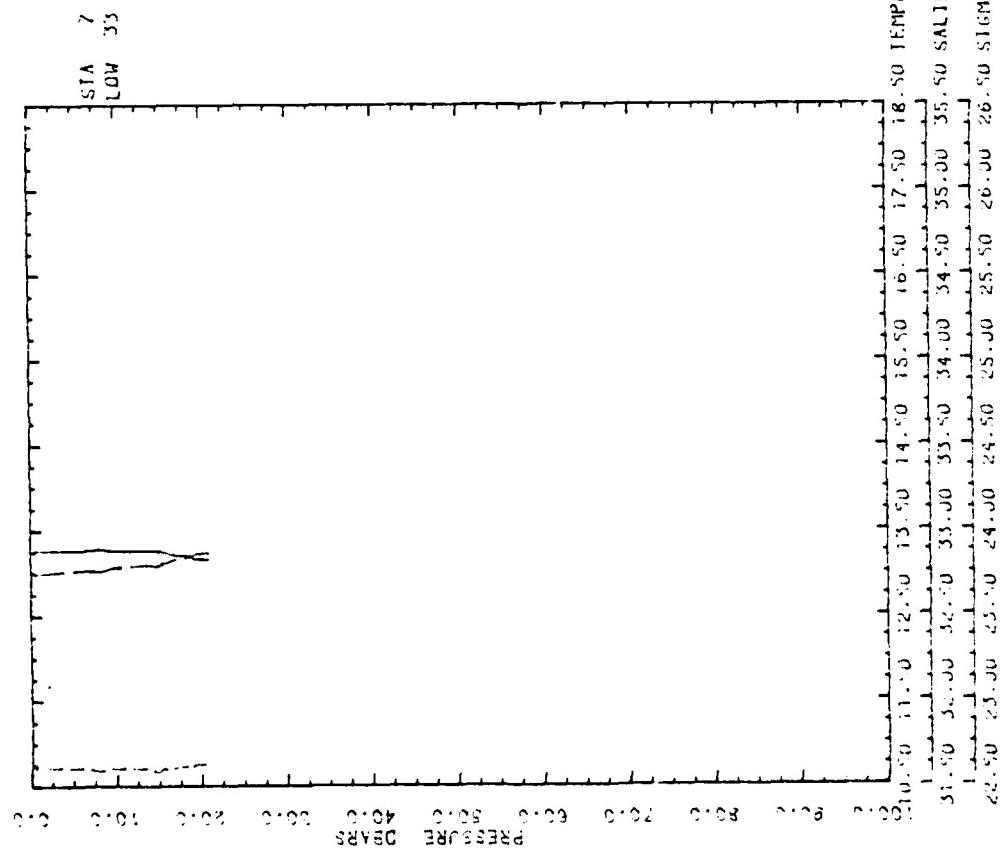
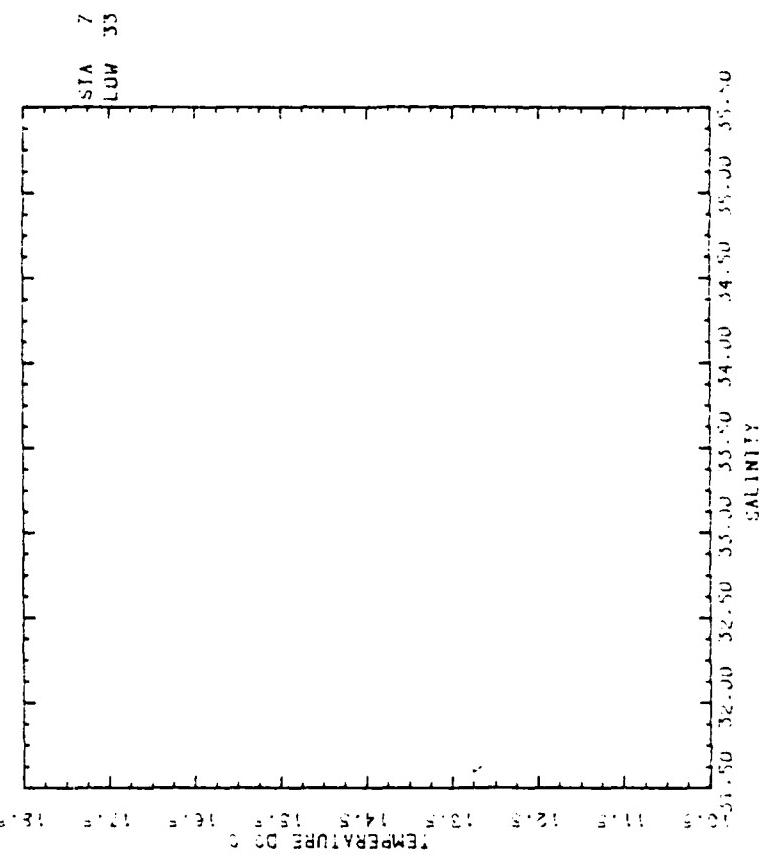


Figure A.33

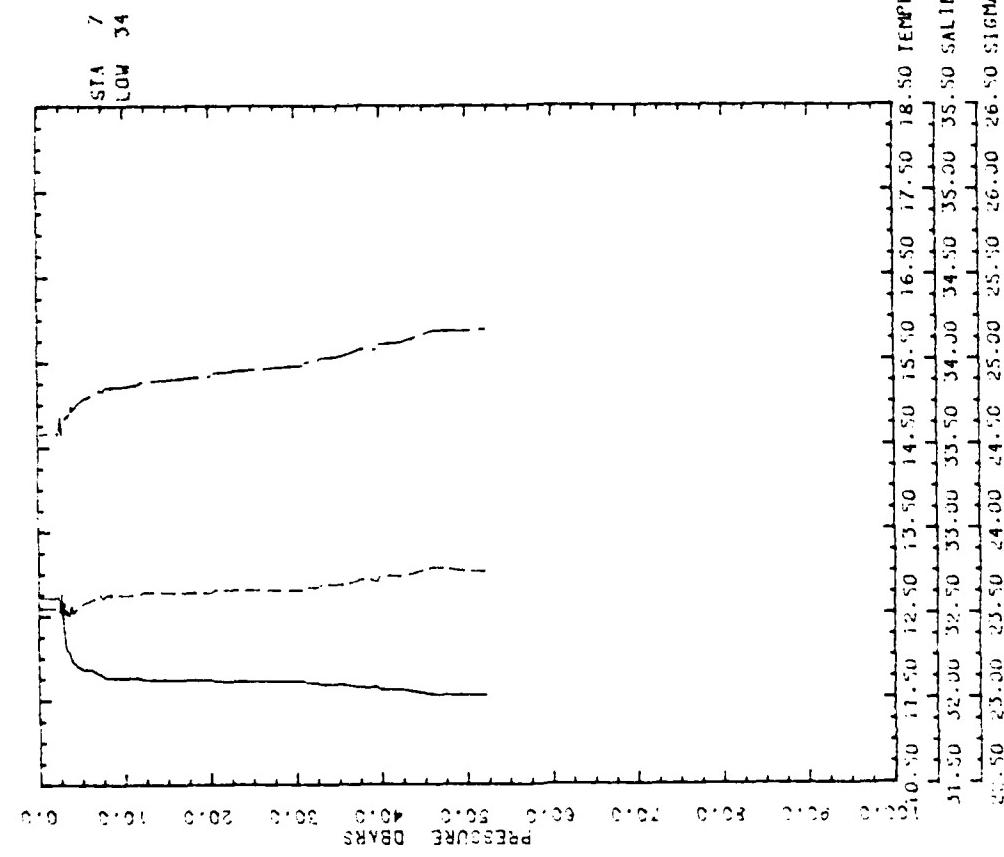
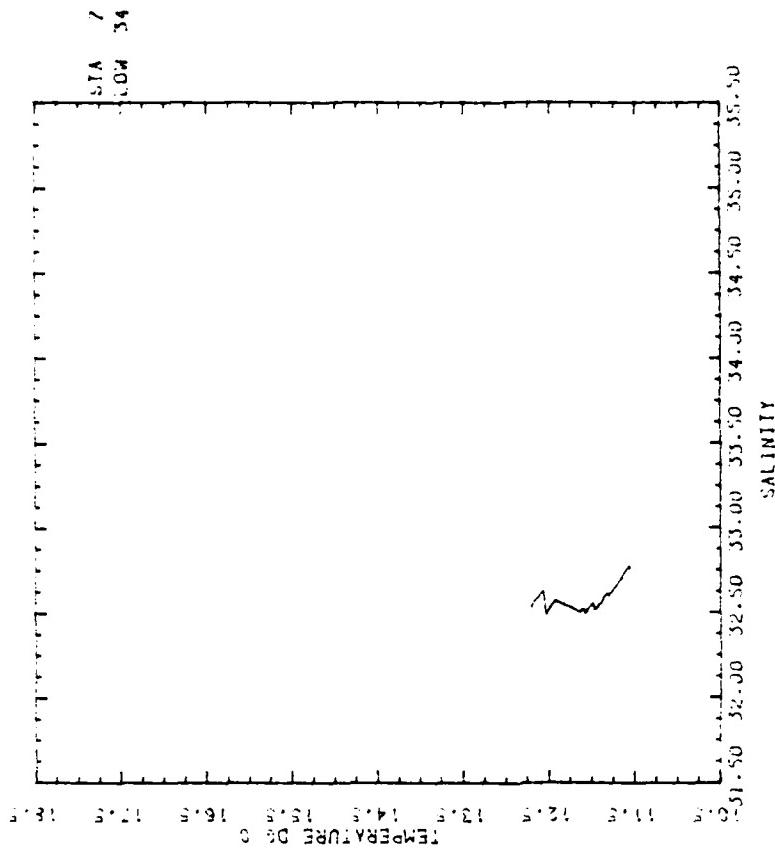


Figure A.34

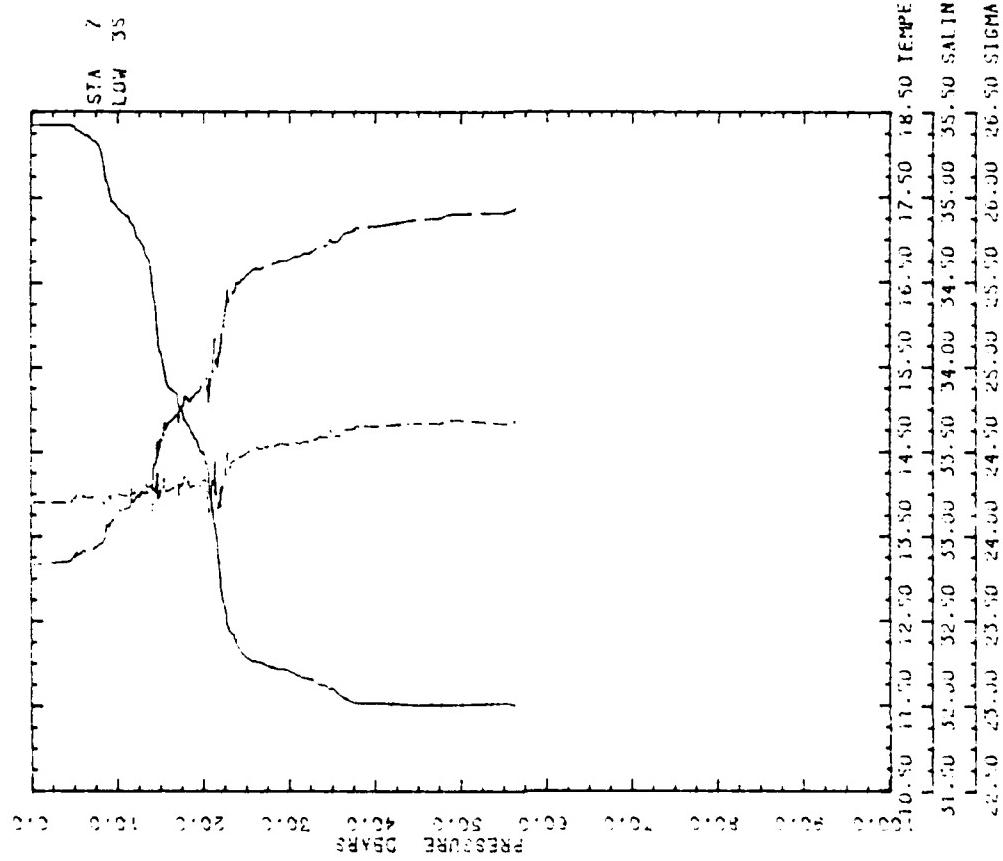
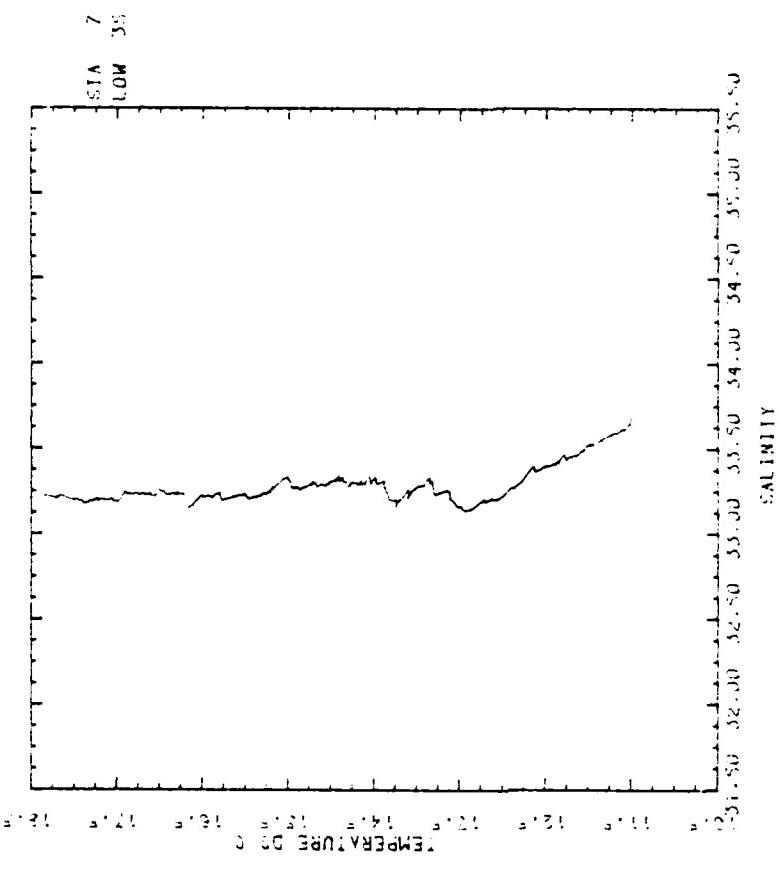


Figure A.35

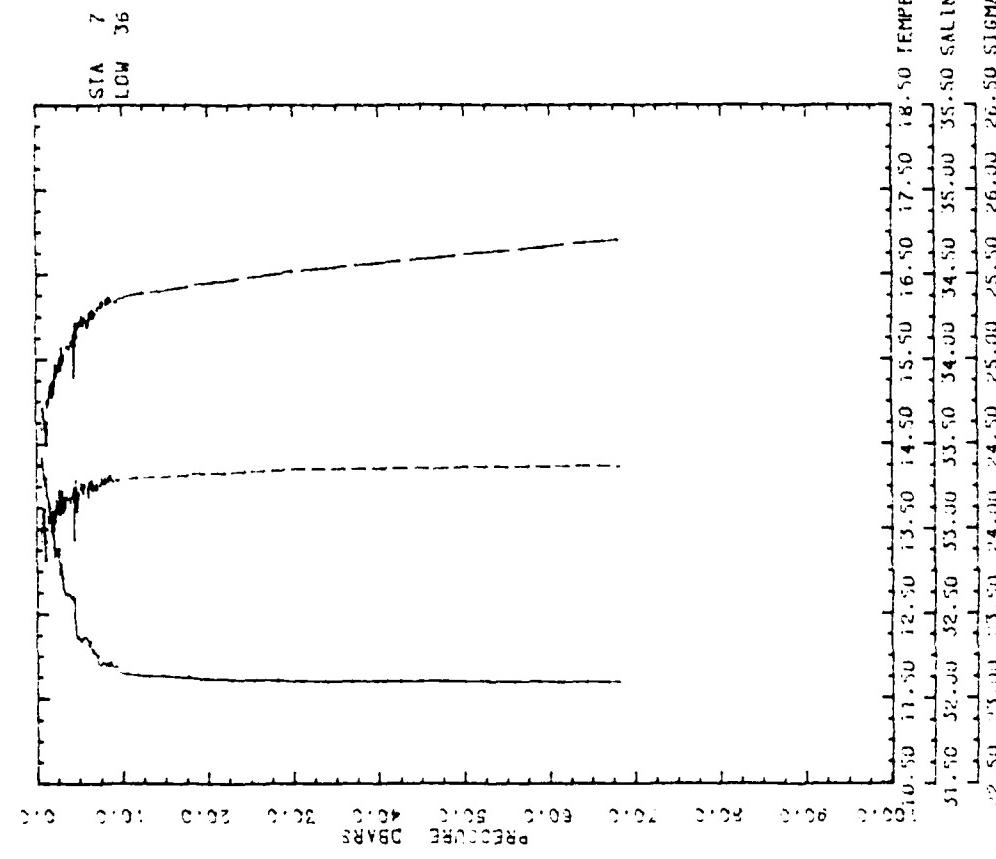
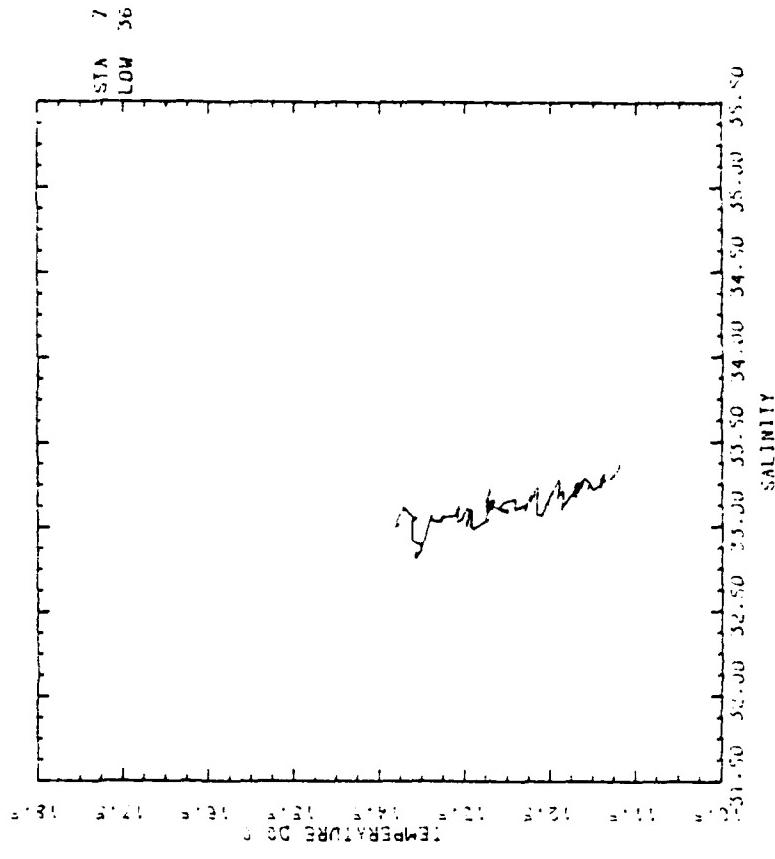


Figure A.36

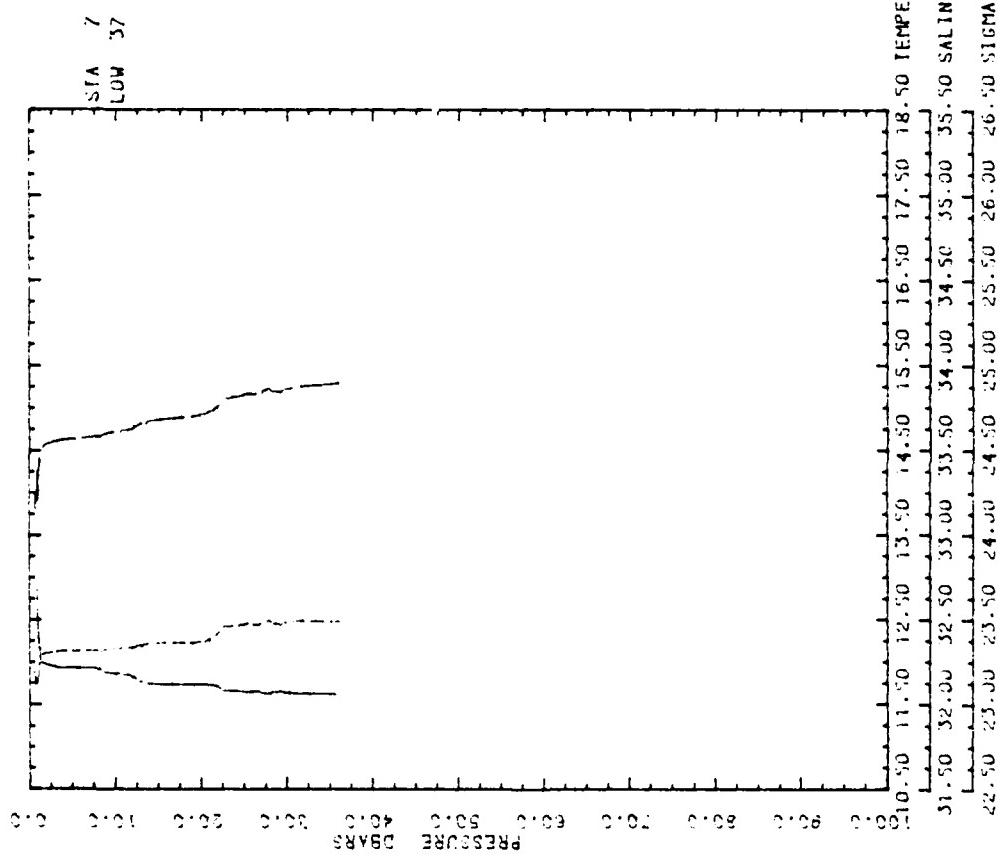
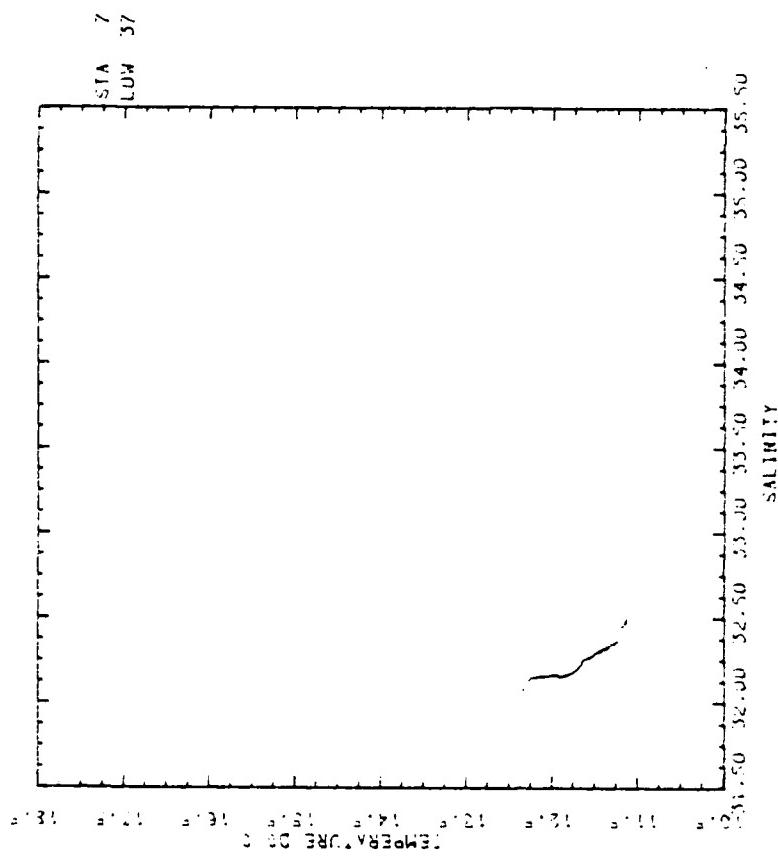


Figure A.37

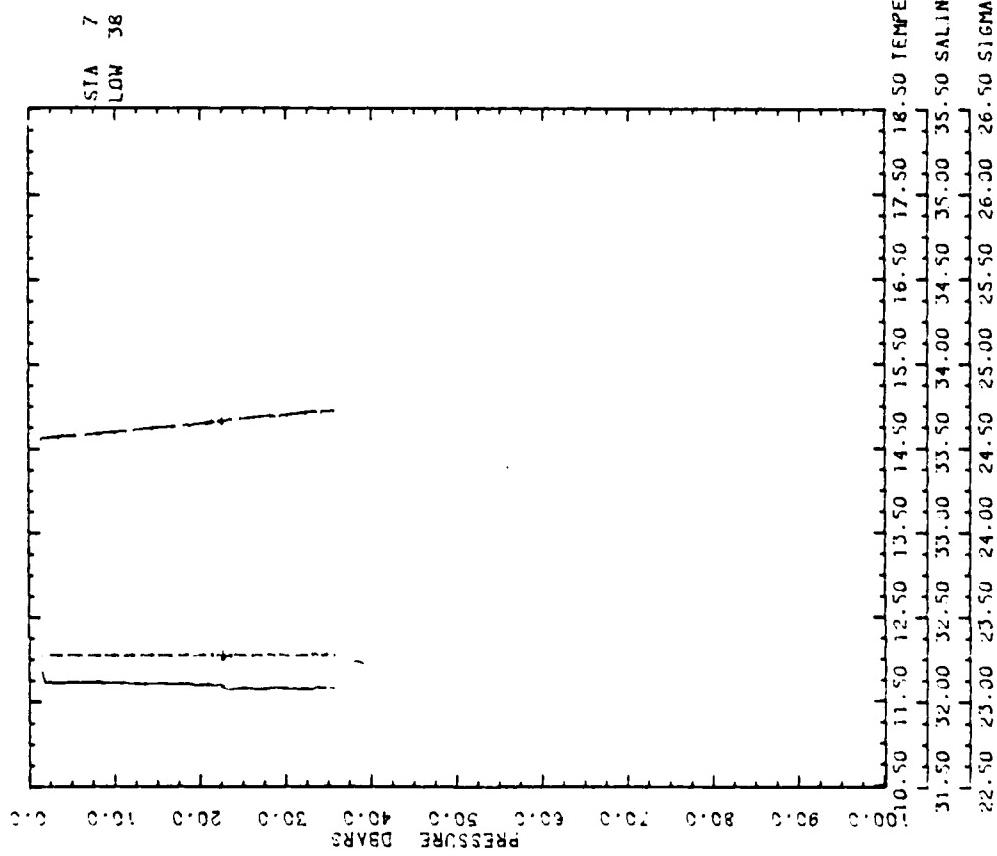
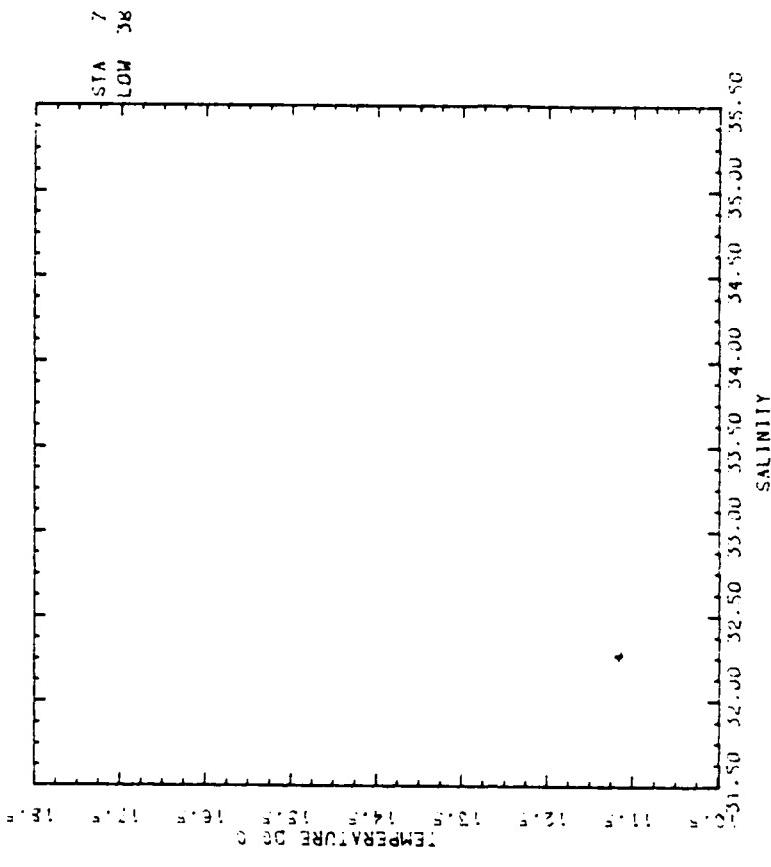


Figure A.38

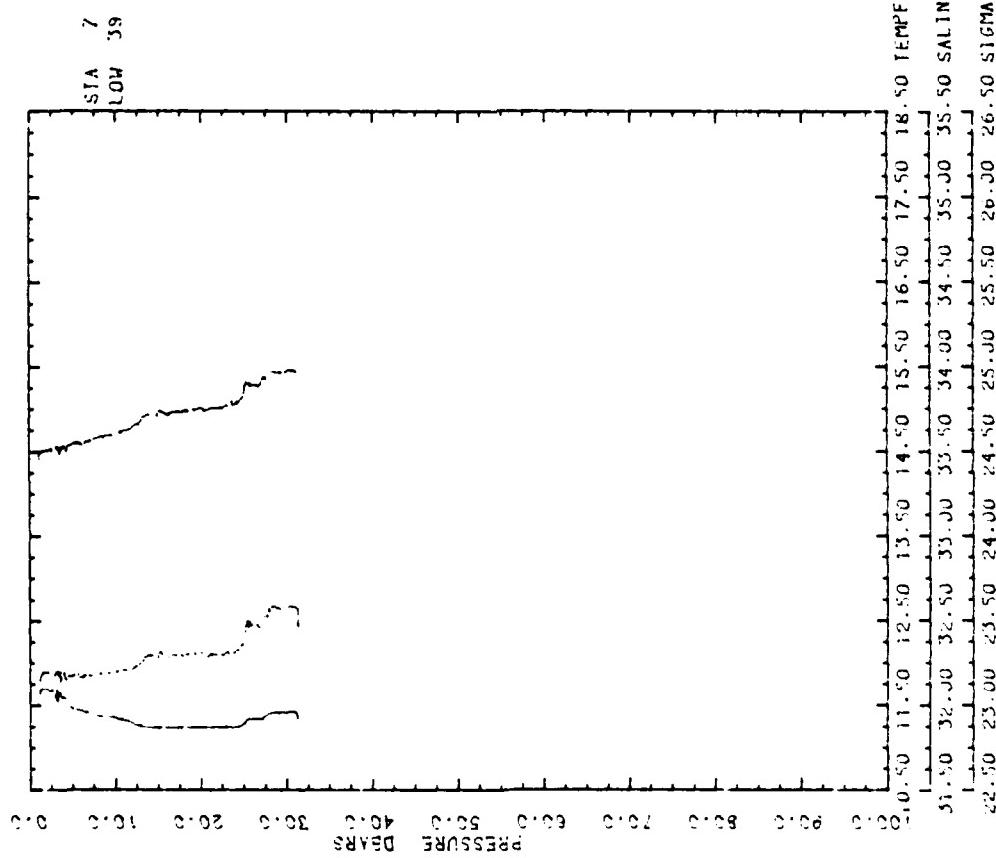
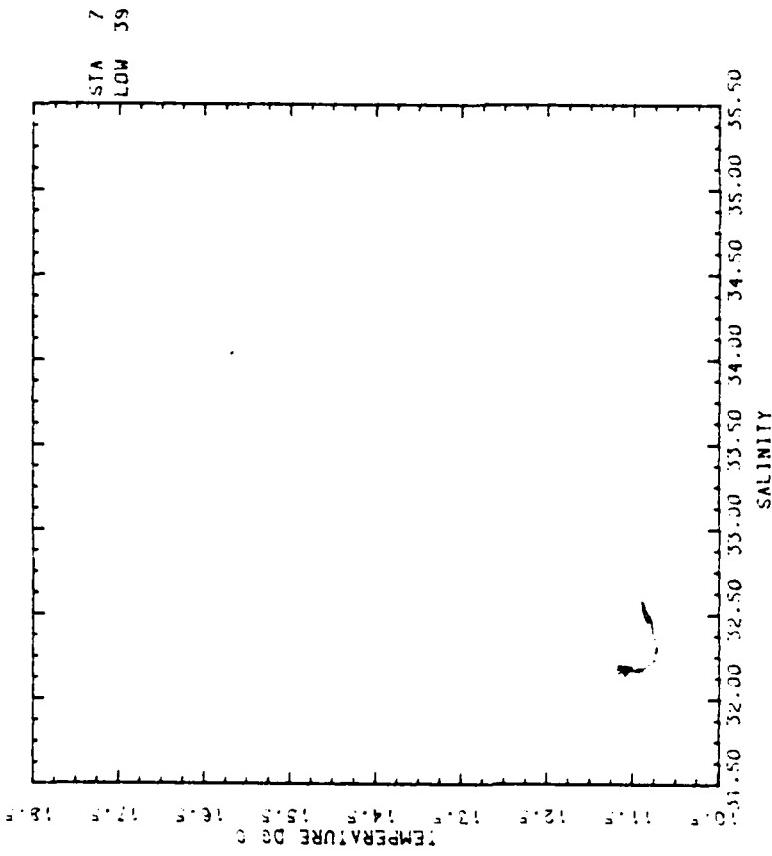
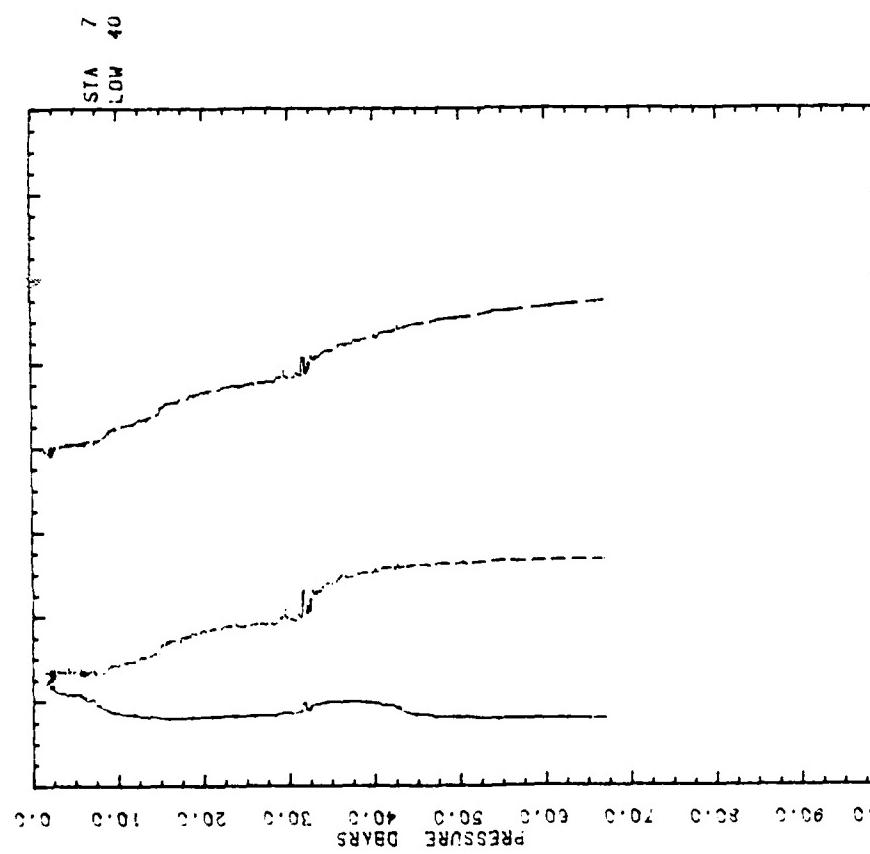
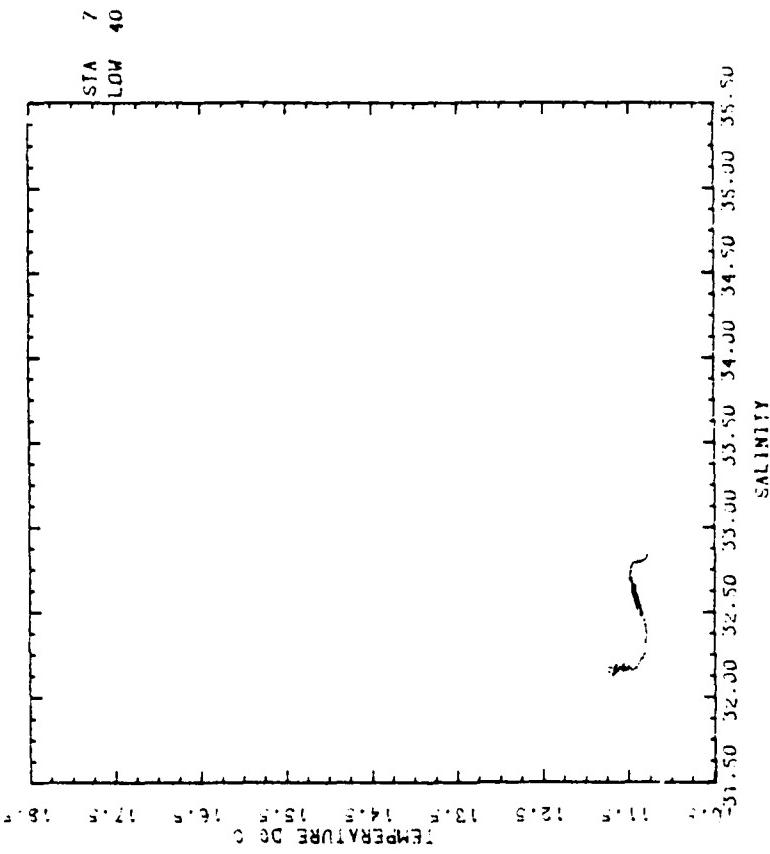
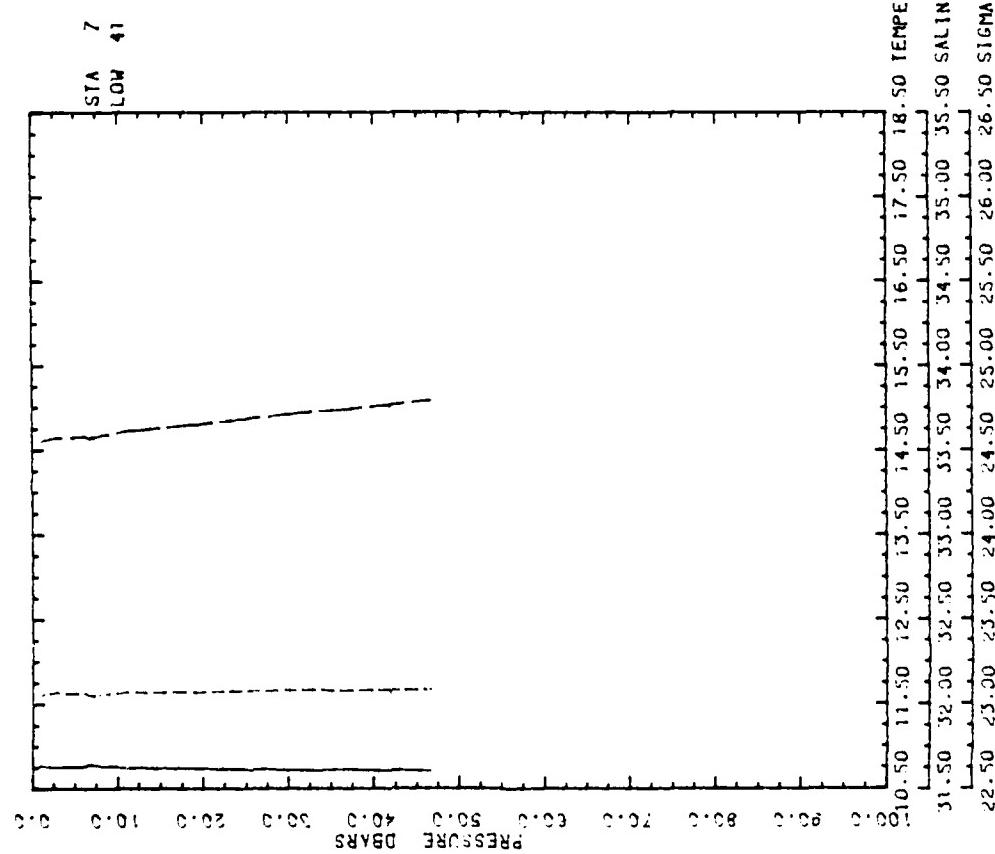
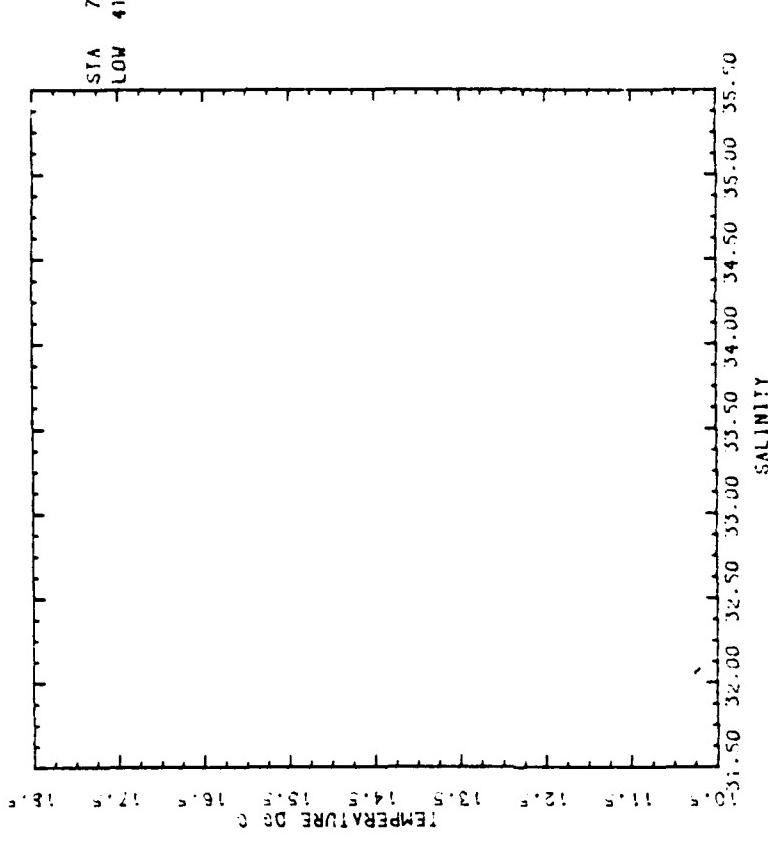


Figure A.39



TEMPERATURE DEG C  
10.50 11.50 12.50 13.50 14.50 15.50 16.50 17.50 18.50  
SALINITY  
31.50 32.00 32.50 33.00 33.50 34.00 34.50 35.00 35.50  
SIGMA T  
22.50 23.00 23.50 24.00 24.50 25.00 25.50 26.00 26.50

Figure A.40



#### APPENDIX B. TABULATIONS OF CTD DATA

Lowerings 1 to 41 are tabulated sequentially in Tables. The data was processed in accordance with IV-A. After pressure reversal and wild point elimination, the data was averaged over 1 meter bins. Depth, temperature, conductivity, salinity and sigma-T are tabulated. The average vertical velocity of the CTD for each bin is also tabulated along with counts of accepted and rejected data scans.

Lowerings 8 to 13 and 27 to 34 were hand digitized. Data was interpolated to every .1 m depth so the point counts represent this. The vertical velocity is unobtainable for these lowerings so it was omitted.

## DEPTH BIN AVERAGED CTD DATA

START TIME = 1972/2324Z POSITION = 40 49.2N 099 17.7EW  
 STA NO = 7 DEW NO = 1 FAST NO = 2 TEMP NO = 3  
 BIN SIZE = 1.0M DEPTHS TOP = 0.0m BOTTOM = -100.0m SURFACE PRES = 1.00DBAR

BIN NO	DBAR M	FAST-T DEG-C	ACCRU-T DEG-C	SAL PPT	SIGMA-T SIGMA-3	CLOUD MM.CM	CH4 PPM	NO. TOT	PRES/BIN	
									USED	WLLD
1	91	11 4392	11 4393	31 8265	24 3333	36 3353	40	1393	35	0
2	41	11 3879	11 3879	31 8486	24 3810	36 3819	47	1744	94	0
3	53	11 3568	11 3568	31 9005	24 3818	36 2989	47	1744	46	0
4	51	11 3331	11 3331	31 9271	24 4019	36 2850	36	155	46	0
5	47	11 3166	11 3166	31 9742	24 4019	36 2781	20	158	16	0
6	53	11 3097	11 3097	31 9778	24 4176	36 2752	62	30	47	0
7	40	11 3004	11 3004	31 9835	24 4294	36 2740	20	160	87	0
8	54	11 2872	11 2872	31 9908	24 4423	36 2703	34	110	46	0
9	46	11 2768	11 2768	31 9967	24 4543	36 2675	27	110	73	0
10	50	11 2687	11 2687	32 0013	24 4637	36 2654	38	33	49	0
11	10 58	11 2586	11 2586	32 0071	24 4738	36 2629	48	64	59	0
12	11 55	11 2426	11 2426	32 0149	24 4883	36 2571	47	68	0	0
13	12 49	11 2213	11 2213	32 0262	24 5060	36 2501	35	97	70	0
14	13 49	11 2109	11 2109	32 0327	24 5182	36 2480	31	97	43	0
15	14 57	11 1993	11 1993	32 0415	24 5336	36 2471	39	80	34	0
16	15 47	11 1958	11 1958	32 0447	24 5399	36 2476	42	75	33	0
17	16 53	11 1949	11 1949	32 0454	24 5462	36 2480	51	91	53	0
18	17 24	11 1944	11 1944	32 0461	24 5502	36 2482	44	86	25	0
19	18 50	11 1835	11 1835	32 0599	24 5504	36 2534	37	86	80	0
20	19 48	11 1628	11 1628	32 0853	24 5973	36 2613	45	66	41	0
21	20 52	11 1493	11 1493	32 1026	24 6191	36 2674	51	30	52	0
22	21 47	11 1074	11 1074	32 1581	24 6725	36 2870	27	115	34	0
23	22 46	11 0936	11 0936	32 1751	24 6918	36 2923	25	41	36	0
24	23 51	11 0803	11 0803	32 1913	24 7126	36 2973	91	332	29	0
25	24 41	11 0686	11 0686	32 2039	24 7281	36 3001	21	146	94	0
26	25 54	11 0581	11 0581	32 2116	24 7386	36 2999	45	98	54	0
27	26 40	11 0521	11 0521	32 2198	24 7529	36 3015	19	166	34	0
28	26 56	11 0408	11 0408	32 2335	24 7737	36 3035	31	105	32	0
29	28 48	11 0315	11 0315	32 2443	24 7853	36 3092	20	134	31	0
30	29 54	11 0260	11 0260	32 2511	24 7983	36 3122	41	76	63	0
31	30 45	11 0231	11 0231	32 2596	24 8057	36 3145	24	128	86	0
32	31 59	11 0218	11 0218	32 2602	24 8153	36 3190	24	128	86	0
33	32 43	11 0208	11 0208	32 2663	24 8218	36 3241	36	88	55	0
34	33 57	11 0193	11 0193	32 2713	24 8350	36 3284	51	93	53	0
35	34 40	11 0187	11 0187	32 2738	24 8418	36 3307	19	164	69	0
36	35 55	11 0169	11 0169	32 2811	24 8519	36 3370	41	76	55	0
37	36 45	11 0095	11 0095	32 3042	24 8245	36 3545	21	144	53	0
38	37 42	10 9879	10 9879	32 3295	24 9293	36 3541	36	91	44	0
39	38 59	10 9788	10 9788	32 3841	24 9598	36 4085	21	130	44	0
40	39 45	10 9735	10 9735	32 3965	24 9689	36 4165	48	64	55	0
41	40 57	10 9669	10 9669	32 4192	24 9912	36 4300	19	161	58	0
42	41 44	10 9593	10 9593	32 4342	25 0072	36 4428	57	55	46	0
43	42 67	10 9541	10 9541	32 4482	25 0315	36 4533	21	149	75	0
44	43 48	10 9570	10 9570	32 4393	25 0245	36 4462	42	71	38	0
45	44 44	10 9646	10 9646	32 4211	25 0084	36 4355	01	196	124	0
46	45 52	10 9542	10 9542	32 4546	25 0444	36 4604	10	298	25	0
47	45 44	10 9444	10 9444	32 4790	25 0587	36 4758	15	352	34	0
48	47 54	10 9428	10 9428	32 4818	25 0785	36 4786	22	381	34	0
49	48 44	10 9412	10 9412	32 4882	25 0906	36 4845	21	358	34	0
50	49 44	10 9376	10 9376	32 5022	25 1071	36 4953	12	252	31	0
51	50 57	10 9346	10 9346	32 5126	25 1216	36 5036	02	1962	100	0

MAXIMUM DEPTH OF CAST = 31.0m

## DEPTH BIN AVERAGED CTD DATA

START TIME 1973/0021Z POSITION 40 49 84N 40 13 7W								
STA NO 7 LOW NO		INST NO 2 TYPE NO 1		BIN SIZE = 1 DM DEPTHS TOP = 0 DM BOTTOM = 100 DM SURFACE PRES = 1000DBAR				
BTN ND	DHAR M	FAST-T DEG-C	ACCU-R-T DEG-C	SHL PPT	SIGMA-T G/DMKX3	COND MM/CM	VEL M/SEC	NO POINTS/BIN USED
1	83	12 1414	12 1414	32 1343	24 3650	32 1745	.92	444 34
3	154	12 1151	12 1161	32 1304	24 3202	32 1481	.14	213 65
3	38	12 0823	12 0823	32 1333	24 3428	32 1212	.26	112 20
4	48	11 0832	11 0832	32 1447	24 4485	32 0844	.23	136 79
5	48	11 5651	11 5651	32 1533	24 5032	32 0819	.17	58 49
6	554	11 4335	11 4335	32 1930	24 5630	32 0456	.31	98 74
7	552	11 4160	11 4150	32 2035	24 5802	32 0011	.31	101 74
8	48	11 4125	11 4125	32 2031	24 5845	32 5929	.40	74 62
9	51	11 4110	11 4110	32 2039	24 5903	32 5978	.53	50 47
10	50	11 4098	11 4098	32 2070	24 5983	32 6004	.24	129 86
11	51	11 3740	11 3740	32 2102	24 6100	32 5221	.51	50 51
12	55	11 1920	11 1920	32 2757	24 7001	32 4771	.51	60 45
13	48	11 0689	11 0689	32 3693	24 7987	32 4632	.34	92 70
14	52	10 9998	10 9998	32 4505	24 8289	32 4837	.42	26 57
15	51	10 9784	10 9784	32 4942	24 8228	32 4911	.40	37 57
16	46	10 9674	10 9674	32 5180	24 9470	32 5235	.35	89 54
17	58	10 9558	10 9558	32 5420	24 9723	32 5379	.26	47 42
18	52	10 9334	10 9334	32 5820	25 0174	32 5655	.83	49 46
19	41	10 9232	10 9232	32 5074	25 0384	32 5752	.34	133 86
20	50	10 9041	10 9041	32 6498	25 0794	32 6014	.77	40 37
21	58	10 8969	10 8969	32 6655	25 0999	32 6111	.47	55 53
22	43	10 8843	10 8843	32 7610	25 1800	32 6263	.34	90 70
23	53	10 8737	10 8737	32 8283	25 2356	32 548	.34	59 51
24	52	10 8728	10 8728	32 8549	25 2612	32 2897	.40	28 56
25	52	10 8858	10 8858	32 8733	25 2835	32 8118	.38	81 55
26	50	10 8940	10 8940	32 8945	25 2985	32 8410	.55	56 48
27	52	10 8965	10 8965	32 8944	25 3055	32 8436	.33	50 55
28	53	10 8969	10 8969	32 8944	25 3117	32 8444	.38	82 65
29	46	10 9199	10 9199	32 9501	25 3531	32 9215	.46	58 52
30	53	10 9175	10 9175	32 9356	25 3449	32 9052	.45	71 55
31	49	10 9433	10 9433	32 9766	25 3896	32 9903	.41	73 62
32	46	10 9599	10 9599	33 0152	25 4159	32 0250	.62	51 44
33	52	10 9700	10 9700	33 041	25 4381	32 0607	.43	71 51
34	43	10 9745	10 9745	33 057	25 4527	32 0819	.33	95 76
35	49	10 9817	10 9817	33 104	25 5012	32 1348	.60	50 41
36	51	10 9851	10 9851	33 1164	25 5078	32 1510	.01	4834 122
37	49	10 9881	10 9881	33 1326	25 5233	32 1704	.20	147 79
38	52	10 9973	10 9973	33 1959	25 5766	32 2429	.49	65 57
39	53	11 0006	11 0006	33 2043	25 5900	32 3542	.33	133 86
40	51	11 0017	11 0017	33 2108	25 5930	32 2628	.56	55 49
41	54	11 0053	11 0053	33 2418	25 6188	32 2977	.42	73 58
42	45	11 0078	11 0078	33 2560	25 6403	32 3142	.34	94 69
43	48	11 0090	11 0090	33 2664	25 6612	32 3282	.53	58 49
44	53	11 0117	11 0117	33 2943	25 6773	32 3577	.44	70 59
45	40	11 0129	11 0129	33 3011	25 5890	32 3659	.28	113 88
46	53	11 0133	11 0133	33 3081	25 6989	32 3239	.72	42 32
47	56	11 0137	11 0137	33 3119	25 6988	32 3285	.59	54 48
48	47	11 0139	11 0139	33 3156	25 7196	32 3828	.70	102 24
49	51	11 0141	11 0141	33 3223	25 7301	32 3902	.46	78 48
50	48	11 0145	11 0145	33 3309	25 7332	32 3996	.44	72 59
51	55	11 0146	11 0146	33 3351	25 7437	32 4045	.42	24 52
52	48	11 0147	11 0147	33 3347	25 7520	32 4084	.41	75 59
53	54	11 0148	11 0148	33 3408	25 7572	32 4111	.43	71 55
54	43	11 0150	11 0150	33 3410	25 7693	32 4119	.44	71 51
55	51	11 0150	11 0150	33 3402	25 7618	32 4110	.41	72 51

MAXIMUM DEPTH OF CAST = 55 00M

## DEPTH BIN AVERAGED CTD DATA

START TIME		1930/01/04Z		POSITION		40 49 85N	29 7 09W			
STA NO	LOW NU	HIGH NU	INST NO	TAPE NO						
BIN SIZE = 1.0M		DEPTHS		TOP = 0.0M	BOTTOM = 100.0M	SURFACE PRES = 1000HPa				
BIN NO	DBAR M	FAST-T DEG-C	ACCU-T DEG-C	SAL PPT	SIGMA-T G/CM**3	COND MM/CM	VEL M/SEC	NO TOTAL	POINTERS/BIN USED	WILD
1	1.72	15 3331	15 3331	33 0700	24 4352	41 1043	83	20	17	0
2	1.57	15 2189	15 2189	33 0572	24 4554	40 9840	88	35	32	0
3	2.51	14 9687	14 9687	33 0442	24 5042	40 7358	18	128	45	0
4	3.56	14 3926	14 3926	33 1333	24 7003	40 2949	43	74	50	0
5	4.44	13 8474	13 8474	33 1143	24 8041	39 7669	23	153	32	0
6	5.58	13 4800	13 4800	33 1200	24 8879	39 4326	40	74	31	0
7	6.44	13 3345	13 3345	33 1137	24 9170	39 2913	23	138	21	1
8	7.50	13 2953	13 2953	33 1196	24 9342	39 2620	29	118	21	0
9	8.49	13 2382	13 2382	33 1205	24 9515	39 2108	39	79	57	0
10	9.48	13 0112	13 0112	33 1252	25 0061	39 0059	24	133	91	0
11	10.44	12 7172	12 7172	33 1482	25 0451	38 7595	33	92	28	1
12	11.64	12 6236	12 6236	33 1532	25 1133	38 6791	24	127	27	1
13	12.40	12 5089	12 5089	33 1633	25 1271	38 6758	31	102	26	0
14	13.63	12 5241	12 5241	33 1844	25 1667	38 5202	19	165	28	0
15	14.50	12 4487	12 4487	33 1800	25 1931	38 5465	49	63	30	0
16	15.50	12 4203	12 4203	33 1942	25 2018	38 5355	19	167	83	0
17	16.49	12 3293	12 3293	33 2031	25 2322	38 4615	17	177	94	0
18	17.55	12 2899	12 2899	33 2132	25 2524	38 4366	16	192	54	1
19	18.52	12 2626	12 2626	33 2142	25 2625	38 4124	54	56	49	0
20	19.54	12 2073	12 2073	33 2199	25 2845	38 3678	42	72	50	0
21	20.51	12 1579	12 1579	33 2341	25 3060	38 3325	31	100	54	0
22	21.45	12 1031	12 1031	33 2132	25 3079	38 2659	51	68	51	0
23	22.52	11 9876	11 9876	33 2370	25 3536	38 1846	86	48	44	0
24	23.54	11 9398	11 9398	33 2641	25 3859	38 1680	24	127	34	0
25	24.47	11 8671	11 8671	33 2643	25 4085	38 1028	83	37	31	0
26	25.54	11 7933	11 7933	33 2741	25 4332	38 0455	23	34	31	0
27	26.59	11 6527	11 5527	33 2977	25 4853	37 9410	24	129	28	0
28	27.48	11 4989	11 4989	33 3162	25 5262	37 8197	72	40	35	0
29	28.54	11 4725	11 4725	33 3415	25 5585	37 8210	83	37	34	0
30	29.64	11 4157	11 4157	33 3435	26 5752	37 7713	29	106	35	0
31	30.45	11 3253	11 3253	33 3302	26 5874	37 6754	53	58	44	0
32	31.52	11 2557	11 2557	33 3424	26 6104	37 6119	66	42	41	0
33	32.53	11 2354	11 2354	33 3454	26 6272	37 5998	49	55	55	0
34	33.53	11 2081	11 2081	33 3487	26 6352	37 5863	41	76	60	0
35	34.46	11 1942	11 1942	33 3530	26 6495	37 5800	34	91	56	0
36	35.53	11 1975	11 1975	33 3521	26 6491	37 5826	23	43	33	0
37	36.51	11 1980	11 1980	33 3519	26 6554	37 5835	70	39	35	0
38	37.54	11 1772	11 1772	33 3570	26 6692	37 5698	27	11	10	0
39	38.52	11 1413	11 1413	33 3576	26 6783	37 5372	57	46	40	0
40	39.52	11 1350	11 1350	33 3655	26 6923	37 5405	57	53	48	0
41	40.52	11 1230	11 1230	33 3612	26 6936	37 5256	34	92	40	1
42	41.49	11 0989	11 0989	33 3689	26 7116	37 5117	59	54	42	0
43	42.54	11 0839	11 0839	33 3706	26 7239	37 5001	53	59	47	0
44	43.50	11 0794	11 0794	33 3745	26 7276	37 5003	33	93	73	0
45	44.51	11 0743	11 0743	33 3744	26 7382	37 4960	56	55	47	0
46	45.54	11 0688	11 0688	33 3775	26 7393	37 4945	39	86	58	0
47	46.45	11 0599	11 0599	33 3774	26 7411	37 4959	49	85	57	0
48	47.56	11 0711	11 0711	33 3720	26 7434	37 4971	69	46	40	0
49	48.61	11 0699	11 0699	33 3726	26 7603	37 4970	38	76	54	0
50	49.51	11 0717	11 0717	33 3770	26 7720	37 4984	52	96	54	0
51	50.47	11 0711	11 0711	33 3768	26 7637	37 4982	48	58	57	0
52	51.53	11 0667	11 0667	33 3785	26 7211	37 4982	53	49	47	0
53	52.54	11 0633	11 0633	33 3799	26 7825	37 4950	73	170	73	0
54	53.50	11 0601	11 0601	33 3811	26 7877	37 4936	76	39	75	0
55	54.54	11 0608	11 0608	33 3811	26 7874	37 4947	75	49	43	0
56	55.41	11 0595	11 0595	33 3819	26 8025	37 4947	20	156	49	0
57	56.54	11 0572	11 0572	33 3830	26 7939	37 4941	68	44	42	0
58	57.59	11 0572	11 0572	33 3827	26 8042	37 4949	21	147	27	1
59	58.49	11 0579	11 0579	33 3826	26 8096	37 4953	43	71	58	0
60	59.46	11 0584	11 0584	33 3825	26 8068	37 4960	47	65	51	0
61	60.55	11 0583	11 0583	33 3822	26 8156	37 4962	43	73	50	0
62	61.39	11 0557	11 0557	33 3843	26 8276	37 4963	25	143	24	0
63	62.50	11 0531	11 0531	33 3855	26 8316	37 4975	58	53	44	0
64	63.53	11 0530	11 0530	33 3861	26 8369	37 4965	17	181	101	0
65	64.53	11 0519	11 0519	33 3864	26 8391	37 4962	47	67	58	0
66	65.47	11 0567	11 0567	33 3845	26 8458	37 4990	16	189	51	0

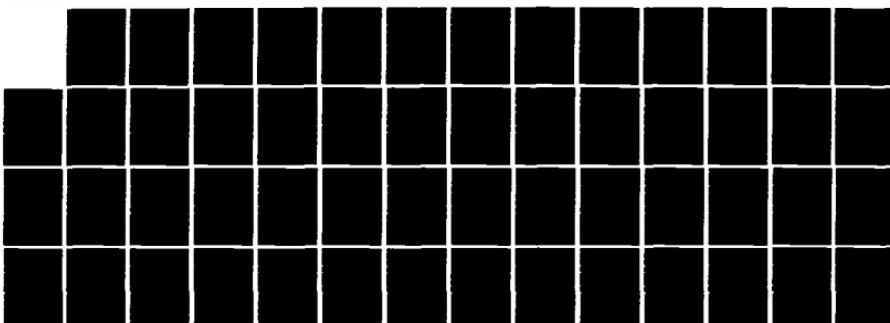
MAXIMUM DEPTH OF CAST = 56.02M

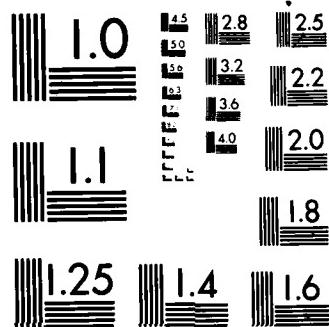
AD-A132 083 DATA VALIDATION AND SUMMARY FOR THE NRL REMOTE SENSING 2/2  
EXPERIMENT PHELPS. (U) NAVAL RESEARCH LAB WASHINGTON DC  
J A KAISER 02 SEP 83 NRL-MR-5165

UNCLASSIFIED

F/G 8/8

NL





MICROCOPY RESOLUTION TEST CHART  
NATIONAL BUREAU OF STANDARDS 1963 A

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START TIME: 193/11/37 POSITION: 40 49 31N 09 2 19W  
STA. NO. 7 LOW NO. 4 INST. NO. 2 TAPE NO. 1  
STAN. DEPTHS: 100M DEPTHS: 100M BOTTOM: 100M

A/N NU	DR/R M	FAST-T DEG-C	ACCUR-T DEG-C	SAL PPT	SIGMA-T G/CM <sup>2</sup>	CND MM/DM	VEL M/SEC	NU TOTAL	POINTS/MIN USED	
									MIN	WLD
10450	1 50	15 2183	15 2183	33 1267	24 4312	40 9490	79	3	2	3
	1 54	12 2094	12 2094	33 0312	24 4327	40 9458	78	102	2	1
	3 97	15 1581	15 1581	33 0311	24 4556	40 8982	75	43	40	40
	4 11	14 8470	14 8470	32 9626	24 4753	40 8338	78	34	22	20
	5 16	13 6501	13 6501	32 9317	24 7075	39 3884	83	36	37	30
10451	7 9	15 3884	15 3884	33 0227	24 8349	39 2443	33	92	67	60
	7 9	13 3873	13 3873	33 0285	24 8451	39 2498	54	51	42	39
	9 14	15 9342	15 9342	33 0118	24 9255	38 3151	72	39	31	10
10452	9 10	15 8873	15 8873	33 0460	24 9676	38 9080	56	55	49	47
10453	10 09	12 8889	12 8889	33 0418	24 9689	38 8055	53	53	47	44
10454	11 17	10 8092	12 8092	33 0433	24 9877	38 7341	45	38	59	1
	11 35	12 7299	12 7299	33 0415	25 0087	38 5595	92	42	41	41
	13 18	12 6331	12 6331	33 0468	25 0355	38 5765	96	70	31	31
	14 15	12 5862	12 5862	33 0542	25 0559	38 5425	93	33	33	30
	15 15	12 5340	12 5340	33 0567	25 0731	38 4972	47	24	47	3
10455	17 02	12 4427	12 4427	33 0514	25 0905	38 4077	41	76	55	55
	17 02	12 1615	12 1615	33 0356	25 1342	38 1344	99	35	23	23
	18 12	11 2515	11 2515	33 0726	25 1433	37 7924	1	14	24	10
	19 12	11 5493	11 5493	33 0999	25 3106	37 6413	93	34	31	31
	20 17	11 5198	11 5198	33 1150	25 3368	37 6300	47	35	42	30
10456	21 07	11 5020	11 5020	33 1186	25 3440	37 6180	50	68	51	51
	23 05	11 4898	11 4898	33 1231	25 3567	37 5113	51	58	52	52
	24 12	11 4595	11 4595	33 1194	25 3622	37 5809	75	41	32	31
	25 11	11 3925	11 3925	33 1123	25 3751	37 5112	74	43	45	39
	26 11	11 3820	11 3820	33 1158	25 3800	37 5073	72	43	48	39
10457	26 12	11 3721	11 3721	33 1172	25 3885	37 5047	72	42	58	9
	27 09	11 3753	11 3753	33 1162	25 3969	37 5024	46	55	55	55
	28 02	11 3841	11 3841	33 1239	25 4020	37 5175	58	36	47	47
	29 12	11 4123	11 4123	33 1313	25 4086	37 5254	94	31	27	24
	30 13	11 4183	11 4183	33 1332	25 4120	37 6033	1	12	24	24
10458	31 13	11 4007	11 4007	33 1380	25 4217	37 5495	83	38	33	33
	33 13	11 3862	11 3862	33 1423	25 4406	37 5411	39	50	50	50
	33 02	11 3530	11 3530	33 1536	25 4554	37 5220	51	60	50	50
	34 18	11 3177	11 3177	33 1655	25 4720	37 5029	98	33	29	29
	35 11	11 3029	11 3029	33 1687	25 4829	37 4911	1	10	28	27
10459	36 16	11 2985	11 2985	33 1685	25 4914	37 4894	96	52	28	28
	37 21	11 2964	11 2964	33 1923	25 4980	37 4887	47	65	47	47
	38 21	11 2916	11 2916	33 2102	25 5062	37 4885	48	78	52	52
	39 05	11 2888	11 2888	33 1997	25 5099	37 4830	1	83	38	38
	40 11	11 2875	11 2875	33 1699	25 5152	37 4825	1	12	27	26
10460	41 16	11 2762	11 2762	33 1790	25 5745	37 4817	88	36	33	33
	42 22	11 2715	11 2715	33 1829	25 5363	37 4819	55	84	52	52
	43 01	11 2662	11 2662	33 1884	25 5448	37 4829	55	56	44	44
	44 10	11 2646	11 2646	33 1998	25 5555	37 4844	99	32	32	32
	45 14	11 2615	11 2615	33 1938	25 5585	37 4850	1	14	27	23
10461	46 15	11 2578	11 2578	33 1966	25 5728	37 4849	98	38	34	34
	47 19	11 2544	11 2544	33 1995	25 5751	37 4852	57	80	51	51
	48 01	11 2495	11 2495	33 2037	25 5786	37 4850	47	52	54	54
	49 09	11 2489	11 2489	33 2042	25 5922	37 4850	98	32	24	24
	50 10	11 2498	11 2498	33 2039	25 5984	37 4868	1	10	36	27
10462	51 13	11 2495	11 2495	33 2036	25 6061	37 4866	66	35	31	31
	52 13	11 2383	11 2383	33 2154	25 6126	37 4897	48	34	32	32
	53 07	11 2286	11 2286	33 2258	25 6291	37 4907	52	52	54	54
	54 13	11 2249	11 2249	33 2286	25 6312	37 4906	78	45	48	48
	55 12	11 2167	11 2167	33 2349	25 6509	37 4895	60	44	41	41
10463	56 11	11 2113	11 2113	33 2388	25 6451	37 4894	56	56	50	50
	57 14	11 2073	11 2073	33 2458	25 6246	37 4912	27	58	53	53
	58 15	11 2031	11 2031	33 2502	25 6739	37 4848	63	59	55	55
	59 14	11 2014	11 2014	33 2475	25 6344	37 4908	50	50	41	41
	60 10	11 2003	11 2003	33 2683	25 2081	37 5089	51	51	48	48
10464	61 07	11 1980	11 1980	33 2401	25 2052	37 4805	72	40	34	34
	62 12	11 1919	11 1919	33 2623	25 2173	37 5031	25	45	38	38
	63 14	11 1900	11 1900	33 2695	25 2208	37 5030	46	75	71	71
	64 10	11 1863	11 1863	33 2730	25 2329	37 5045	99	47	41	41
	65 10	11 1822	11 1822	33 2678	25 2224	37 4859	99	51	30	30
10465	66 13	11 1787	11 1787	33 2294	25 7391	37 5050	81	38	32	32
	67 09	11 1769	11 1769	33 2867	25 2498	37 5111	22	118	41	41
	68 12	11 1768	11 1768	33 2914	25 2534	37 5162	75	41	76	76
	69 15	11 1751	11 1751	33 2956	25 2608	37 5193	23	45	39	39
	70 13	11 1735	11 1735	33 3013	25 2725	37 5239	29	119	71	71
10466	71 08	11 1727	11 1727	33 3037	25 2915	37 5261	50	54	43	43
	72 20	11 1719	11 1719	33 3068	25 2944	37 5291	47	56	44	44
	73 06	11 1728	11 1728	33 3120	25 3025	37 5354	31	111	53	53
	74 18	11 1861	11 1861	33 3390	25 8239	37 5254	43	71	57	57
	75 13	11 2049	11 2049	33 3682	25 8547	37 5224	54	88	54	54
10467	76 07	11 2142	11 2142	33 3264	25 8616	37 4799	20	112	55	55
	77 13	11 2166	11 2166	33 3780	25 8740	37 5439	18	127	113	113
	78 12	11 2152	11 2152	33 3748	25 8756	37 5400	48	80	53	53
	79 07	11 2192	11 2192	33 3862	25 8830	37 5555	14	214	62	62
	80 07	11 2192	11 2192	33 3842	25 8870	37 5555	14	214	62	62

MAXIMUM DEPTH OF CAST = 79 M

DEPTA REN AVERAGED CTO DATE

BIN NO	DRAR M	FAST-T DEG-C	ACCRU-T DEG-C	SHL PPT	SIGMA-T GCM MAX3	CLOUD MM/CM	VEL M/SFT	NO TOTAL	PW TS. RDN WLD
1	1 06	12 2734	12 2734	32 2043	24 9829	38 1557	43	11	11 00
2	1 76	11 9502	11 9502	32 9082	25 0037	37 8029	93	140	29 00
3	2 80	11 8563	11 8563	33 9885	25 1254	37 6180	21	140	22 00
4	3 83	11 5557	11 5557	33 0250	25 1254	37 5040	58	84	23 00
5	4 73	11 5027	11 5027	33 0344	25 1997	37 5258	29	89	25 00
6	5 74	11 4800	11 4800	33 0466	25 2171	37 5179	43	71	54 00
7	6 65	11 4428	11 4428	33 0579	25 2371	37 4900	35	82	39 00
8	7 59	11 4179	11 4179	33 0698	25 2553	37 4852	40	89	32 00
9	8 69	11 4169	11 4169	33 0204	25 2622	37 4872	20	84	32 00
10	9 69	11 4171	11 4171	33 0210	25 2671	37 4872	25	41	36 00
11	10 74	11 4153	11 4153	33 0726	25 2735	37 4872	35	59	25 00
12	11 65	11 4166	11 4166	33 0218	25 2753	37 4883	55	59	25 00
13	12 59	11 4119	11 4119	33 0747	25 2862	37 4873	69	45	40 00
14	13 59	11 4074	11 4074	33 0728	25 2943	37 4871	60	51	44 00
15	14 71	11 4048	11 4048	33 0793	25 2984	37 4862	53	50	45 00
16	15 69	11 4027	11 4027	33 0807	25 3043	37 4865	87	46	41 00
17	16 74	11 4007	11 4007	33 0820	25 3140	37 4865	21	51	55 00
18	17 65	11 3960	11 3960	33 0830	25 3206	37 4836	78	55	40 00
19	18 70	11 3779	11 3779	33 0841	25 3302	37 4868	78	41	37 00
20	19 67	11 3537	11 3537	33 0889	25 3414	37 4519	24	43	48 00
21	20 59	11 3414	11 3414	33 0908	25 3472	37 4430	77	40	36 00
22	21 76	11 3312	11 3312	33 0927	25 3586	37 4365	79	40	33 00
23	22 75	11 3140	11 3140	33 0951	25 3571	37 4233	55	51	0 00
24	23 67	11 3003	11 3003	33 0977	25 3751	37 4148	54	52	42 00
25	24 69	11 2859	11 2859	33 1002	25 3884	37 4037	85	37	33 00
26	25 70	11 2737	11 2737	33 1023	25 3975	37 3951	100	30	24 00
27	26 72	11 2668	11 2668	33 1042	25 4004	37 3912	35	32	25 00
28	27 72	11 2623	11 2623	33 1055	25 4126	37 3889	58	32	44 00
29	28 65	11 2606	11 2606	33 0987	25 4037	37 3888	53	31	44 00
30	29 71	11 2550	11 2550	33 0909	25 4099	37 3683	88	35	47 00
31	30 72	11 2450	11 2450	33 1090	25 4289	37 3240	100	30	29 00
32	31 24	11 2468	11 2468	33 1096	25 4325	37 3083	88	30	23 00
33	32 76	11 2459	11 2459	33 1095	25 4381	37 3001	58	30	43 00
34	33 63	11 2436	11 2436	33 1101	25 4447	37 3280	85	37	35 00
35	34 70	11 2426	11 2426	33 1104	25 4578	37 3289	85	37	35 00
36	35 73	11 2430	11 2430	33 1104	25 4569	37 3797	94	30	32 00
37	36 74	11 2427	11 2427	33 0953	25 4464	37 3654	79	39	36 00
38	37 70	11 2413	11 2413	33 0957	25 4514	37 3651	77	41	36 00
39	38 68	11 2412	11 2412	33 0805	25 4485	37 3489	81	38	33 00
40	39 69	11 2411	11 2411	33 0827	25 4473	37 3515	77	40	36 00
41	40 73	11 2411	11 2411	33 1112	25 4829	37 3809	50	52	51 00
42	41 69	11 2411	11 2411	33 1112	25 4812	37 3813	73	43	59 00
43	42 71	11 2414	11 2414	33 1113	25 4879	37 3821	100	45	29 00
44	43 74	11 2420	11 2420	33 1109	25 4940	37 3822	19	26	25 00
45	44 73	11 2430	11 2430	33 1106	25 5017	37 3837	85	30	14 00
46	45 75	11 2423	11 2423	33 1033	25 4962	37 3750	40	77	66 00
47	46 66	11 2433	11 2433	33 1109	25 5132	37 3851	72	41	26 00
48	47 72	11 2429	11 2429	33 1110	25 5073	37 3853	100	26	24 00
49	48 73	11 2436	11 2436	33 1109	25 5203	37 3863	100	27	21 00
50	49 74	11 2440	11 2440	33 1109	25 5292	37 3671	93	35	21 00
51	50 75	11 2430	11 2430	33 1114	25 5280	37 3870	42	73	55 00
52	51 66	11 2418	11 2418	33 1124	25 5415	37 3674	46	69	44 00
53	52 70	11 2433	11 2433	33 1128	25 5405	37 3899	70	44	40 00
54	53 69	11 2433	11 2433	33 1127	25 5432	37 3901	81	38	36 00
55	54 71	11 2432	11 2432	33 1124	25 5432	37 3900	86	34	34 00
56	55 79	11 2419	11 2419	33 1124	25 5552	37 3892	24	43	64 00
57	56 54	11 2427	11 2427	33 1126	25 5556	37 3905	74	33	33 00
58	57 68	11 2443	11 2443	33 0947	25 5561	37 3743	27	22	25 00
59	58 72	11 2443	11 2443	33 1144	25 5662	37 3947	100	48	27 00
60	59 81	11 2426	11 2426	33 1052	25 5736	37 3843	53	46	54 00
61	60 61	11 2426	11 2426	33 1143	25 5812	37 3939	50	108	58 00
62	61 71	11 2426	11 2426	33 1129	25 5768	37 3924	90	33	57 00
63	62 76	11 2428	11 2428	33 1137	25 5741	37 3914	56	33	53 00
64	63 75	11 2434	11 2434	33 1141	25 5954	37 3958	76	35	56 00
65	64 77	11 2429	11 2429	33 1126	25 5994	37 3943	53	46	51 00
66	65 65	11 2423	11 2423	33 1126	25 6047	37 3940	47	65	51 00
67	66 62	11 2425	11 2425	33 1121	25 6082	37 3941	90	52	52 00
68	67 62	11 2428	11 2428	33 123	25 6112	37 3950	100	40	29 00
69	68 75	11 2423	11 2423	33 1123	25 6206	37 3951	23	48	34 00
70	69 69	11 2427	11 2427	33 1130	25 6392	37 3944	24	129	87 00
71	70 70	11 2432	11 2432	33 1129	25 6255	37 3972	49	24	52 00
72	71 73	11 2431	11 2431	33 1130	25 5345	37 3972	45	29	59 00
73	72 71	11 2441	11 2441	33 1141	25 6310	37 4001	34	40	43 00
74	73 70	11 2435	11 2435	33 1024	25 5345	37 3932	24	129	83 00
75	74 72	11 2446	11 2446	33 1130	25 6419	37 4010	49	25	50 00
76	75 68	11 2448	11 2448	33 1132	25 5473	37 4016	19	159	25 00
77	76 71	11 2468	11 2468	33 1153	25 5520	37 4054	29	159	35 00
78	77 72	11 2422	11 2422	33 1062	25 6574	37 3971	100	129	55 00
79	78 76	11 2428	11 2428	33 0824	25 5540	37 3248	56	59	45 00

MAXIMUM DEPTH OF CAST = 79 POM

### **DEPARTMENT OF THE STATE**

START TIME 1970-03-14 POSITION 30 55 01N 02 50 00E  
END TIME 1970-03-14 POSITION 30 55 01N 02 50 00E  
DURATION = 1 HRS DEPTHS TOP = 1000 BOTTOM = 1000

MAXIMUM DEPTH OF LAYER = 500 m

## DEPTH BIN AVERAGED CTD DATA

START TIME 193/0348Z POSITION 40 54 96N 69 14 01W STA NO 7 LOW NO 7 INST NO 3 TAPE NO 1 BIN SIZE = 10M DEPTHS TOP = 0M, BOTTOM = 1000M SURFACE PRES = 1000DBAR										
BIN NO	DBAR M	FAST-T DEG-C	ACCU-T DEG-C	SAL PPT	SIGMA-T G/CM***3	COND MM/CM	VEL M/SEC	NO TOTAL	POINTS/BIN USED	WILD
1	46	11 2205	11 2205	32 0740	24 4844	36 2930	****	10	10	0
2	53	11 2205	11 2205	32 0782	24 4926	36 2977	****	9	9	0
3	55	11 1947	11 1947	32 1095	24 5260	36 3070	****	9	9	0
4	55	11 1856	11 1856	32 1316	24 5510	36 3219	****	9	9	0
5	58	11 1830	11 1830	32 1484	24 5686	36 3371	****	9	9	0
6	55	11 1819	11 1819	32 1564	24 5815	36 3446	****	9	9	0
7	53	11 1580	11 1580	32 2063	24 6228	36 3742	****	9	9	0
8	55	11 1583	11 1583	32 3085	24 7074	36 4707	****	9	9	0
9	56	11 2048	11 2048	32 3896	24 7729	36 6030	****	9	9	0
10	58	11 2462	11 2462	32 4638	24 8266	36 7158	****	9	9	0
11	54	11 2448	11 2448	32 4924	24 8566	36 7440	****	8	8	0
12	51	11 1779	11 1779	32 5329	24 9036	36 7254	****	9	9	0
13	55	11 1476	11 1476	32 5785	24 9191	36 7044	****	9	9	0
14	57	11 1538	11 1538	32 5904	24 9599	36 7630	****	9	9	0
15	59	11 1563	11 1563	32 6211	24 9845	36 7968	****	9	9	0
16	56	11 1291	11 1291	32 6454	25 0169	36 7974	****	9	9	0
17	52	11 1320	11 1320	32 7100	25 0737	36 8652	****	9	9	0
18	54	11 1330	11 1330	32 7251	25 1133	36 9102	****	9	9	0
19	56	11 1407	11 1407	32 7663	25 1262	36 9313	****	9	9	0
20	58	11 1719	11 1719	32 8320	25 1722	37 0265	****	9	9	0
21	54	11 2557	11 2557	32 9150	25 2278	37 1868	****	8	8	0
22	51	11 2971	11 2971	32 9281	25 2344	37 2380	****	9	9	0
23	53	11 3183	11 3183	32 9314	25 2442	37 2610	****	9	9	0
24	55	11 3200	11 3200	32 9493	25 2550	37 2811	****	9	9	0
25	57	11 3200	11 3200	32 9546	25 2646	37 2871	****	9	9	0
26	55	11 3200	11 3200	32 7542	25 2762	37 2870	****	8	8	0
27	52	11 3118	11 3118	32 9511	25 2895	37 2870	****	9	9	0
28	54	11 3146	11 3146	32 9583	25 2822	37 2870	****	9	9	0
29	56	11 2955	11 2955	32 9808	25 3021	37 2930	****	9	9	0
30	58	11 2983	11 2983	32 0165	25 3499	37 3322	****	9	9	0
31	56	11 3075	11 3075	33 0155	25 3519	37 3400	****	9	9	0
32	52	11 3017	11 3017	33 0204	25 3682	37 3400	****	9	9	0
33	54	11 2995	11 2995	33 0219	25 3654	37 3400	****	9	9	0
34	55	11 3040	11 3040	33 0275	25 3618	37 3502	****	9	9	0
35	57	11 2903	11 2903	33 0243	25 4069	37 3857	****	9	9	0
36	59	11 2705	11 2705	33 0989	25 4407	37 3930	****	9	9	0
37	56	11 2705	11 2705	33 0985	25 4384	37 3930	****	9	9	0
38	53	11 2705	11 2705	33 0981	25 4413	37 3930	****	9	9	0
39	58	11 2705	11 2705	33 0976	25 4570	37 3930	****	9	9	0
40	57	11 2705	11 2705	33 0972	25 1492	37 3930	****	9	9	0
41	54	11 2705	11 2705	33 0968	25 4609	37 3930	****	9	9	0
42	50	11 2705	11 2705	33 0964	25 4842	37 3930	****	9	9	0
43	52	11 2705	11 2705	33 0960	25 4594	37 3930	****	9	9	0
44	54	11 2713	11 2713	33 0948	25 1713	37 3930	****	9	9	0
45	56	11 2763	11 2763	33 0899	25 4906	37 3930	****	9	9	0
46	53	11 2813	11 2813	33 0850	25 4749	37 3930	****	8	8	0
47	50	11 3635	11 3635	33 1005	25 4980	37 3930	****	9	9	0
48	52	11 3137	11 3137	33 1270	25 5158	37 3930	****	9	9	0
49	55	11 1955	11 1955	33 1609	25 5633	37 3930	****	9	9	0
50	56	11 1291	11 1291	33 2075	25 6742	37 3799	****	9	9	0
51	58	11 1268	11 1268	33 1964	25 6059	37 3670	****	9	9	0
52	55	11 1960	11 1960	33 2142	25 5536	37 3670	****	9	9	0
53	53	11 1150	11 1150	33 2012	25 6281	37 3624	****	9	9	0
54	55	11 1084	11 1084	33 2015	25 5253	37 3593	****	9	9	0
55	57	11 0858	11 0858	33 2243	25 5637	37 3594	****	9	9	0
56	59	11 0830	11 0830	33 2057	25 6530	37 3482	****	7	7	0
57	56	11 0830	11 0830	33 1432	25 5414	37 3365	****	9	9	0
58	53	11 0830	11 0830	33 2008	25 6504	37 3343	****	9	9	0
59	57	11 0830	11 0830	33 1979	25 5551	37 3320	****	9	9	0
60	57	11 0830	11 0830	33 1951	25 6789	37 3297	****	9	9	0
61	59	11 0830	11 0830	33 1425	25 5562	37 3275	****	9	9	0
62	56	11 0830	11 0830	33 1916	25 6620	37 3270	****	8	8	0

MAXIMUM DEPTH OF CAST = 62 02M

DEPTH BIN AVERAGED CTD DATA

START TIME 193/2212Z POSITION 40 44 50N 69 13 32W  
STA. NO. 7 (LOW N) 9 INST NO. 1 TAPE NO. 1  
BIN SIZE = 1 DM DEPTHS TOP = 0 DM. BOTTOM = 1000 DM

BIN NO		DBAR M	FAST-T DEG-C	ACCUR-T DEG-C	SNL PPT	SIGMA-T IG/CM**3	GND MM/CM	VEL M/SEC	WT TOTAL	POINTING/HIN USED
1	46	15	2635	15	6435	31	5613	39	8310	****
1	41	15	3378	15	3378	31	9267	39	8310	****
3	205	15	8619	15	8619	32	8794	38	6067	****
4	357	15	8885	15	8885	32	7227	38	2839	****
5	458	15	5007	15	5007	32	2696	38	1620	****
6	555	15	6126	15	6126	32	8036	38	2999	****
7	653	15	3951	15	3951	32	5116	37	9673	****
8	755	15	1563	15	1563	32	8747	38	1061	****
9	856	15	1583	15	1583	32	9240	38	1032	****
10	958	15	0725	15	0725	33	0035	38	0161	****
11	1054	11	8671	11	8671	33	0463	37	8729	****
12	1151	11	7567	11	7567	35	0716	37	7984	****
13	1255	11	6114	11	6114	33	0548	37	6490	****
14	1352	11	5712	11	5712	33	0731	37	6320	****
15	1459	11	4922	11	4922	33	0801	37	5670	****
16	1556	11	4474	11	4474	33	0808	37	5273	****
17	1552	11	4468	11	4468	33	0865	37	5330	****
18	1754	11	5426	11	5426	33	1658	37	5597	7
19	1856	11	5341	11	5341	33	1539	37	5520	37
20	1958	11	4762	11	4762	33	1247	37	4379	37
21	2054	11	4767	11	4767	33	1283	37	6045	****
22	2151	11	4631	11	4631	33	1364	37	6007	****
23	2253	11	5200	11	5200	33	2030	37	7210	****
24	2355	11	4105	11	4105	33	1837	37	6017	****
25	2457	11	2887	11	2887	33	1681	37	4750	****
26	2555	11	2538	11	2538	33	1741	37	4489	37
27	2652	11	2355	11	2355	33	1782	37	4636	37
28	2754	11	2602	11	2602	33	2158	37	4971	37
29	2856	11	2844	11	2844	33	2452	37	5227	37
30	2958	11	2856	11	2856	33	2442	37	5246	37
31	3055	11	2331	11	2331	33	2578	37	5176	****
32	3152	11	2066	11	2066	33	2437	37	4795	****
33	3254	11	1799	11	1799	33	3595	37	5628	37
34	3355	11	1612	11	1612	33	2671	37	5827	37
35	3457	11	1580	11	1580	33	2660	37	5798	37
36	3559	11	1537	11	1537	33	2659	37	4553	****
37	3656	11	1365	11	1365	33	2247	37	5984	37
38	3753	11	1233	11	1233	33	2803	37	6193	37
39	3855	11	1094	11	1094	33	2865	37	5426	37
40	3957	11	0937	11	0937	33	2867	37	4370	37
41	4054	11	0830	11	0830	33	2852	37	4129	****
42	4150	11	0830	11	0830	33	2793	37	4069	****
43	4252	11	0830	11	0830	33	2780	37	4061	****
44	4354	11	0830	11	0830	33	2776	37	4083	****
45	4456	11	0830	11	0830	33	2772	37	4060	****
46	4553	11	0830	11	0830	33	2873	37	4166	****
47	4650	11	0830	11	0830	33	3031	37	4330	****
48	4752	11	0823	11	0823	33	3033	37	4350	****
49	4854	11	0705	11	0705	33	3136	37	4065	****
50	4956	11	0705	11	0705	33	3132	37	4330	****
51	5058	11	0705	11	0705	33	3127	37	4330	****

MAXIMUM DEPTH OF CAST = 51.10M

## DEPTH BIN AVERAGED CTD DATA

START TIME 193/2257Z POSITION 40 44 71N 59 5 17W  
 STA NO 7 LOW NO 9 INST NO 3 TAPE NO 1  
 BIN SIZE = 1 OM DEPTHS TOP = 0 OM, BOTTOM = 100 OM SURFACE PRES = 1000HAR

RIN NO	DBAR M	FAST-T DEG-C	ACCUR-T DEG-C	SAL PPT	SIGMA-T G/CM***3	COND MM/CM	VEL M/SEC	NO TOTAL POINTS/BIN USED WTLD
1	46	16 0500	16 0500	33 2580	24 4190	41 9910	****	10 10 0
2	46	16 0417	16 0417	33 2571	24 4254	41 9826	****	9 9 0
3	46	15 9142	15 9142	33 0881	24 3296	41 6721	****	9 9 0
4	46	15 1778	15 1778	33 0467	24 4685	40 9340	****	9 9 0
5	46	14 8493	14 8493	33 1386	24 6120	40 7282	****	9 9 0
6	55	14 6365	14 6365	33 1503	24 6722	40 5424	****	8 9 0
7	55	14 5514	14 5514	33 1128	24 7064	40 2356	****	9 9 0
8	55	13 9783	13 9783	33 1142	24 7913	39 8899	****	9 9 0
9	56	13 3809	13 3809	33 9920	24 8248	39 2069	****	9 9 0
10	56	12 2362	12 2362	33 1599	25 1826	38 3279	****	9 9 0
11	54	11 8424	11 8424	33 1019	25 3715	38 1128	****	8 9 0
12	54	11 5932	11 5932	33 3566	25 4476	38 0320	****	9 9 0
13	54	11 3964	11 3964	33 3498	25 5125	37 7231	****	9 9 0
14	57	11 2302	11 2302	33 4152	25 5854	37 6689	****	9 9 0
15	59	11 1386	11 1386	33 4130	25 6136	37 5861	****	9 9 0
16	56	11 1179	11 1179	33 4293	25 6244	37 5790	****	8 9 0
17	52	11 1112	11 1112	33 4351	25 6393	37 5790	****	9 9 0
18	54	11 1149	11 1149	33 4204	25 6297	37 5681	****	9 9 0
19	56	11 1050	11 1050	33 4260	25 5348	37 5650	****	9 9 0
20	58	11 1000	11 1000	33 4301	25 5627	37 5650	****	9 9 0
21	54	11 0959	11 0959	33 4334	25 6647	37 5650	****	8 9 0
22	51	11 0955	11 0955	33 4333	25 6621	37 5650	****	9 9 0
23	53	11 0955	11 0955	33 4329	25 6675	37 5650	****	9 9 0
24	55	11 0955	11 0955	33 4330	25 6755	37 5656	****	9 9 0
25	57	11 0942	11 0942	33 4438	25 6878	37 5757	****	9 9 0
26	55	11 0833	11 0833	33 4567	25 7146	37 5790	****	8 9 0
27	52	11 0830	11 0830	33 4565	25 7109	37 5790	****	9 9 0
28	54	11 0830	11 0830	33 4561	25 7197	37 5790	****	9 9 0
29	56	11 0830	11 0830	33 4556	25 7254	37 5790	****	9 9 0
30	58	11 0830	11 0830	33 4552	25 7369	37 5790	****	9 9 0
31	50	11 0830	11 0830	33 4548	25 7261	37 5790	****	9 9 0
32	52	11 0830	11 0830	33 4544	25 7254	37 5790	****	9 9 0
33	54	11 0830	11 0830	33 4539	25 7395	37 5790	****	9 9 0
34	55	11 0830	11 0830	33 4535	25 7450	37 5790	****	9 9 0
35	57	11 0830	11 0830	33 4531	25 7325	37 5790	****	9 9 0
36	59	11 0830	11 0830	33 4526	25 7455	37 5790	****	9 9 0
37	56	11 0830	11 0830	33 4522	25 7406	37 5790	****	9 9 0
38	53	11 0830	11 0830	33 4518	25 7432	37 5790	****	9 9 0
39	55	11 0830	11 0830	33 4514	25 7613	37 5790	****	9 9 0
40	57	11 0830	11 0830	33 4509	25 7899	37 5790	****	9 9 0
41	54	11 0826	11 0826	33 4509	25 7681	37 5790	****	8 9 0
42	50	11 0708	11 0708	33 4612	25 7912	37 5790	****	9 9 0
43	52	11 0705	11 0705	33 4611	25 7966	37 5790	****	9 9 0
44	54	11 0705	11 0705	33 4606	25 7950	37 5790	****	9 9 0
45	56	11 0705	11 0705	33 4602	25 8009	37 5790	****	9 9 0
46	53	11 0705	11 0705	33 4598	25 8245	37 5790	****	8 9 0
47	50	11 0705	11 0705	33 4594	25 8053	37 5790	****	9 9 0
48	52	11 0705	11 0705	33 4589	25 7978	37 5790	****	9 9 0
49	54	11 0705	11 0705	33 4585	25 8045	37 5790	****	9 9 0
50	56	11 0705	11 0705	33 4581	25 8485	37 5790	****	9 9 0
51	58	11 0705	11 0705	33 4576	25 8090	37 5790	****	9 9 0
52	56	11 0705	11 0705	33 4572	25 8362	37 5790	****	9 9 0
53	53	11 0705	11 0705	33 4568	25 8263	37 5790	****	9 9 0
54	55	11 0705	11 0705	33 4564	25 8322	37 5790	****	9 9 0
55	57	11 0664	11 0664	33 4597	25 8615	37 5790	****	9 9 0
56	59	11 0455	11 0455	33 4783	25 8746	37 5790	****	9 9 0
57	56	11 0455	11 0455	33 4779	25 8658	37 5790	****	9 9 0
58	53	11 0455	11 0455	33 4725	25 8935	37 5790	****	9 9 0
59	55	11 0362	11 0362	33 4855	25 9434	37 5790	****	9 9 0
60	57	11 0362	11 0362	33 4847	25 9163	37 5790	****	9 9 0
61	59	11 0401	11 0401	33 4811	25 8825	37 5790	****	9 9 0
62	54	11 0434	11 0434	33 4726	25 9150	37 5790	****	9 9 0
63	53	11 0486	11 0486	33 4812	25 9176	37 5790	****	9 9 0
64	53	11 0330	11 0330	33 4863	25 9178	37 5790	****	9 9 0
65	57	11 0330	11 0330	33 4859	25 9304	37 5790	****	9 9 0
66	58	11 0219	11 0219	33 4955	25 9321	37 5790	****	9 9 0
67	55	11 0111	11 0111	33 5050	25 9479	37 5790	****	9 9 0
68	52	11 0154	11 0154	33 5007	25 9498	37 5790	****	9 9 0
69	54	11 0176	11 0176	33 4982	25 9436	37 5790	****	9 9 0

MAXIMUM DEPTH OF CAST = 1000M

## DEPTH BIN AVERAGED CTD DATA

START TIME = 193/23397		POSITION 40 44 90N 58 58 15W		INST NO 3		TIME NO 1		DEPTH NO 100.0M		SURFACE PRES = 100DBAR	
STA NO	BIN SIZE = 1.0M	DEPTHS TOP = 0.0M	DEPTHS BOTTOM = 100.0M								
BIN NO	DBAR M	FAST-T DEG-C	ACCU-T DEG-C	SAL PPT	STGMA-T G/CM***3	COND MM/CM	VEL M/SFC	NO POINTS/BIN TOTAL	USED	WTLD	
1	1 46	16 4620	16 4620	33 3220	24 3741	42 4550	****	10	10	0	
2	1 46	16 4620	16 4620	33 3216	24 3728	42 4550	****	9	9	0	
3	1 45	16 4523	16 4523	33 3280	24 3909	42 4535	****	9	9	0	
4	1 40	16 0404	16 0404	33 3634	24 4406	41 9894	****	9	9	0	
5	1 38	15 3977	15 3977	33 2944	24 5028	41 8895	****	9	9	0	
6	5 55	15 8130	15 8130	33 2826	24 5126	41 7962	****	8	8	0	
7	5 53	15 4075	15 4075	33 3418	24 6559	41 4793	****	9	9	0	
8	5 55	14 6704	14 6704	33 2332	24 7322	40 6658	****	9	9	0	
9	5 56	14 0388	14 0388	33 3812	24 9739	40 2131	****	9	9	0	
10	5 52	13 3073	13 3073	33 4301	25 1823	37 1036	****	9	9	0	
11	10 54	12 5836	12 5836	33 4668	25 3624	38 9499	****	8	8	0	
12	14 51	12 5834	12 5834	33 4694	25 6121	38 7221	****	9	9	0	
13	13 55	11 7757	11 7757	33 5484	25 6602	38 4070	****	9	9	0	
14	13 57	11 4870	11 4870	33 5720	25 6653	38 6073	****	9	9	0	
15	14 59	11 3969	11 3969	33 5729	25 6846	37 9804	****	9	9	0	
16	15 56	11 3389	11 3389	33 5619	25 6930	37 9163	****	8	8	0	
17	16 52	11 3034	11 3034	33 5652	25 7033	37 8823	****	9	9	0	
18	17 54	11 2523	11 2523	33 5483	25 7000	37 8236	****	9	9	0	
19	18 56	11 2205	11 2205	33 5565	25 7102	37 8045	****	9	9	0	
20	19 58	11 2205	11 2205	33 5565	25 7240	37 8033	****	9	9	0	
21	20 54	11 2205	11 2205	33 5450	25 7229	37 7921	****	8	8	0	
22	21 51	11 2142	11 2142	33 5451	25 7289	37 7869	****	9	9	0	
23	23 53	11 1902	11 1902	33 5437	25 7389	37 7638	****	9	9	0	
24	23 55	11 1720	11 1720	33 5495	25 7506	37 7533	****	9	9	0	
25	24 57	11 1513	11 1513	33 5578	25 7637	37 7431	****	9	9	0	
26	25 55	11 1361	11 1361	33 5471	25 7602	37 7188	****	8	8	0	
27	26 52	11 1103	11 1103	33 6446	25 7651	37 4929	****	9	9	0	
28	27 54	11 1080	11 1080	33 6385	25 7245	37 6850	****	9	9	0	
29	28 56	11 1080	11 1080	33 6284	25 7228	37 6853	****	9	9	0	
30	29 58	11 1103	11 1103	33 5575	25 8057	37 7022	****	9	9	0	
31	30 55	11 1229	11 1229	33 5640	25 8055	37 7257	****	8	8	0	
32	31 55	11 1412	11 1412	33 5691	25 8011	37 7481	****	9	9	0	
33	32 54	11 1484	11 1484	33 5880	25 8325	37 7743	****	9	9	0	
34	33 55	11 1631	11 1631	33 5800	25 8209	37 7801	****	9	9	0	
35	34 57	11 1673	11 1673	33 5874	25 8314	37 7920	****	9	9	0	
36	35 59	11 1629	11 1629	33 5943	25 8388	37 7953	****	9	9	0	
37	36 56	11 1591	11 1591	33 6006	25 8533	37 7985	****	9	9	0	
38	37 55	11 1613	11 1613	33 6013	25 8624	37 8017	****	9	9	0	
39	38 55	11 1654	11 1654	33 6993	25 8603	37 8040	****	9	9	0	
40	39 57	11 1697	11 1697	33 5950	25 8645	37 8040	****	9	9	0	
41	40 54	11 1754	11 1754	33 5923	25 8800	37 8170	****	8	8	0	
42	41 56	11 1813	11 1813	33 5965	25 8669	37 8170	****	9	9	0	
43	42 52	11 1794	11 1794	33 5978	25 9052	37 8170	****	9	9	0	
44	43 54	11 1749	11 1749	33 6014	25 9039	37 8170	****	9	9	0	
45	44 50	11 1722	11 1722	33 6035	25 9021	37 8170	****	9	9	0	
46	45 53	11 1807	11 1807	33 5765	25 9053	37 8182	****	8	8	0	
47	46 50	11 1911	11 1911	33 5922	25 8475	37 8289	****	9	9	0	
48	47 50	11 1955	11 1955	33 6027	25 9107	37 8440	****	9	9	0	
49	48 54	11 1939	11 1952	33 6073	25 9149	37 8440	****	9	9	0	
50	49 56	11 1965	11 1965	33 6059	25 9208	37 8440	****	9	9	0	
51	50 58	11 2027	11 2027	33 5998	25 9052	37 8440	****	9	9	0	
52	51 56	11 2077	11 2077	33 5948	25 9053	37 8440	****	9	9	0	
53	52 53	11 2062	11 2062	33 5982	25 9012	37 8477	****	9	9	0	
54	53 55	11 2032	11 2032	33 6082	25 9340	37 8542	****	9	9	0	
55	54 57	11 2003	11 2003	33 6130	25 9220	37 8570	****	9	9	0	
56	55 59	11 1971	11 1971	33 6150	25 9481	37 8571	****	9	9	0	
57	56 56	11 1974	11 1974	33 6140	25 9491	37 8610	****	9	9	0	
58	57 53	11 2016	11 2016	33 6197	25 9551	37 8661	****	9	9	0	
59	58 55	11 2059	11 2059	33 6110	25 9541	37 8718	****	9	9	0	
60	59 57	11 2103	11 2103	33 6224	25 9721	37 8778	****	9	9	0	
61	60 59	11 2147	11 2147	33 6229	25 9723	37 8827	****	9	9	0	
62	61 58	11 2189	11 2189	33 6190	25 9838	37 8830	****	8	8	0	

MAXIMUM DEPTH OF CAST = 62.0M

## DEPTH BIN AVERAGED CTD DATA

START TIME 194/00127 POSITION 40 40 23N 28 57 52W										
STA NO	LOW NO	HIGH NO	INST NO	TOP DEPTH	BOTTOM DEPTH	SURFACE PRESS	DBAR	DEG-C	ACCUR-T	COND MM/CM
BIN SIZE = 1.0M DEPTHS TOP = 0.0M, BOTTOM = 100.0M SURFACE PRES = 1.0DBAR										
BIN NO	DBAR	FAST-T DEG-C	ACCU-T DEG-C	BAL PPT	SIGMA-T g/cm**3	COND MM/CM	VEL M/SFC	NU TOTAL	POINTS BIN USED	WILD
1	1.46	18 4520	18 4520	33 1941	23 7993	44 2170	****	10	10	0
2	1.53	18 4451	18 4451	33 2112	23 8136	44 2126	****	9	9	0
3	1.55	18 3772	18 3772	33 1661	23 8084	44 1054	****	9	9	0
4	1.57	18 2140	18 2140	33 1379	23 8321	43 9163	****	9	9	0
5	1.58	17 9367	17 9367	32 9905	23 7913	43 4728	****	9	9	0
6	5.55	17 1579	17 1579	32 7472	23 7976	42 4564	****	8	8	0
7	9.53	16 3447	16 3447	32 6973	23 8450	41 5346	****	9	9	0
8	9.55	16 3047	16 3047	32 6885	24 3107	41 5239	****	9	9	0
9	9.56	16 5493	16 5493	32 8238	24 3115	41 5996	****	9	9	0
10	9.58	16 2339	16 2339	32 8239	24 3523	40 3028	****	9	9	0
11	10.54	14 8084	14 8084	32 8164	24 4039	40 3380	****	9	9	0
12	11.51	14 2697	14 2697	32 9206	24 6040	39 9525	****	9	9	0
13	12.55	13 7567	13 7567	33 2563	24 9313	40 0254	****	9	9	0
14	13.52	14 2634	14 2634	33 8749	25 3467	40 3425	****	9	9	0
15	14.59	14 2526	14 2526	33 5199	25 0848	40 5886	****	9	9	0
16	15.56	13 7484	13 7484	33 6095	25 2574	40 2105	****	8	8	0
17	16.53	13 3988	13 3988	33 6001	25 3757	39 9353	****	9	9	0
18	17.54	13 9983	13 9983	33 6168	25 4262	39 3154	****	9	9	0
19	18.56	13 6271	13 6271	33 2056	25 3601	39 3104	****	9	9	0
20	19.48	12 2708	12 2708	33 6108	25 5764	38 8316	****	9	9	0
21	20.54	11 7687	11 7687	33 6642	25 2162	38 4201	****	8	8	0
22	21.51	11 5241	11 5241	33 2071	33 2915	38 2838	****	9	9	0
23	22.53	11 5338	11 5338	33 2087	25 8000	38 1585	****	9	9	0
24	23.55	11 5033	11 5033	33 2194	25 8176	38 2314	****	9	9	0
25	24.57	11 4546	11 4546	33 2121	25 3439	38 1844	****	9	9	0
26	25.55	11 4393	11 4393	33 7214	25 8428	38 1750	****	8	8	0
27	26.52	11 4258	11 4258	33 7132	25 8796	38 1528	****	9	9	0
28	27.54	11 4014	11 4014	33 2125	25 8560	38 1559	****	9	9	0
29	28.56	11 3721	11 3721	33 2325	25 8904	38 1350	****	9	9	0
30	29.58	11 3700	11 3700	33 7435	25 8886	38 1350	****	9	9	0
31	30.55	11 3387	11 3387	33 3293	25 6303	37 2325	****	308	308	1
32	31.52	11 3017	11 3017	33 3204	25 3687	37 3400	****	9	9	0
33	32.54	11 2995	11 2995	33 0219	25 3654	37 3400	****	9	9	0
34	33.55	11 3040	11 3040	33 0279	25 3618	37 3502	****	9	9	0
35	34.57	11 2903	11 2903	33 0743	25 4069	37 3857	****	9	9	0
36	35.59	11 2705	11 2705	33 0989	25 4407	37 3930	****	9	9	0
37	36.56	11 2705	11 2705	33 0985	25 4384	37 3930	****	9	9	0
38	37.53	11 2705	11 2705	33 0981	25 4413	37 3930	****	9	9	0
39	38.55	11 2705	11 2705	33 0976	25 4576	37 3930	****	9	9	0
40	39.57	11 2705	11 2705	33 0972	25 4492	37 3930	****	9	9	0
41	40.54	11 2705	11 2705	33 0968	25 4609	37 3930	****	8	8	0
42	41.50	11 2705	11 2705	33 0964	25 4842	37 3930	****	9	9	0
43	42.52	11 2705	11 2705	33 0960	25 4596	37 3930	****	9	9	0
44	43.54	11 2713	11 2713	33 0948	25 4713	37 3930	****	9	9	0
45	44.56	11 2763	11 2763	33 0899	25 4906	37 3930	****	9	9	0
46	45.53	11 2813	11 2813	33 0850	25 4749	37 3930	****	8	8	0
47	46.50	11 2635	11 2635	33 1006	25 4980	37 3930	****	9	9	0
48	47.52	11 2337	11 2337	33 1270	25 5158	37 3930	****	9	9	0
49	48.54	11 1955	11 1955	33 1609	25 5633	37 3930	****	9	9	0
50	49.56	11 1291	11 1291	33 2075	25 6242	37 3799	****	9	9	0
51	50.58	11 1268	11 1268	33 1964	25 6059	37 3670	****	9	9	0
52	51.66	11 1060	11 1060	33 3142	25 5536	37 3670	****	9	9	0
53	52.53	11 1150	11 1150	33 2012	25 6281	37 3624	****	9	9	0
54	53.55	11 1089	11 1089	33 2076	25 4263	37 3583	****	9	9	0
55	54.59	11 0830	11 0830	33 2243	25 6637	37 3596	****	9	9	0
56	55.59	11 0830	11 0830	33 2057	25 6530	37 3387	****	9	9	0
57	56.59	11 0830	11 0830	33 2932	25 6414	37 3365	****	9	9	0
58	57.59	11 0830	11 0830	33 2006	25 6584	37 3343	****	9	9	0
59	58.55	11 0830	11 0830	33 1979	25 6551	37 3320	****	9	9	0
60	59.57	11 0830	11 0830	33 1951	25 6289	37 3297	****	9	9	0
61	60.59	11 0830	11 0830	33 1925	25 5562	37 3275	****	9	9	0
62	61.56	11 0830	11 0830	33 1916	25 6622	37 3270	****	8	8	0

MAXIMUM DEPTH OF CAST -- 62.02M

## DEPTH BIN AVERAGED CTD DATA

BIN NO	DRG	CAST-T	DEG-C	POSITION	NO DEPTHS	TOP = 0 CM BOTTOM = 100 CM	SURFACE PRESSURE = 1000 BAR	NO POINTS/CAST		TOTAL USED	WLD
								PPT	SIGMA-T	COND MM/CM	VEL MSEC
1	45 56	14 2500	16 2500	32 9393	34 1297	41 8190	***	19	19	0	0
2	45 56	14 2479	16 2479	32 9380	34 1341	41 8160	***	9	9	0	0
3	45 56	14 2155	16 0155	32 7248	34 9205	41 1138	***	9	9	0	0
4	45 56	14 2195	16 2195	32 8720	34 3223	40 2792	***	9	9	0	0
5	45 56	14 8091	14 8091	12 1200	34 6917	40 5059	***	9	9	0	0
6	45 56	14 4982	14 4982	32 9891	34 5767	40 2375	***	9	9	0	0
7	45 56	14 1713	14 1713	33 0548	34 7010	40 0047	***	9	9	0	0
8	45 56	14 2934	13 0934	35 1001	34 8383	39 5100	***	9	9	0	0
9	45 56	13 5118	13 5118	33 1287	34 7043	39 4726	***	9	9	0	0
10	45 56	13 4003	13 4003	33 1323	34 9782	39 3288	***	9	9	0	0
11	45 56	14 3144	16 3144	33 1929	34 2754	39 3268	***	9	9	0	0
12	45 56	14 3483	16 3483	33 1928	35 0041	39 1138	***	9	9	0	0
13	45 56	14 1369	14 1369	33 1397	35 0439	39 1270	***	9	9	0	0
14	45 56	14 0184	15 0184	33 2200	35 1293	38 3541	***	9	9	0	0
15	45 56	14 2003	11 2003	33 3924	35 4935	38 8819	***	9	9	0	0
16	45 56	14 5473	11 5473	33 4226	35 5713	37 9874	***	9	9	0	0
17	45 56	14 3688	11 3688	33 4719	35 0182	37 8209	***	9	9	0	0
18	45 56	14 3327	11 3327	33 4895	35 5336	37 9384	***	9	9	0	0
19	45 56	14 0807	11 0807	34 4912	35 6116	37 7928	***	9	9	0	0
20	45 56	14 1932	11 1932	33 5017	35 9562	37 7294	***	9	9	0	0
21	45 56	14 752	11 1752	33 5030	35 1240	37 7256	***	9	9	0	0
22	45 56	14 1552	11 1552	33 5031	35 1242	37 7241	***	9	9	0	0
23	45 56	14 1483	11 1483	33 5058	35 1243	37 7240	***	9	9	0	0
24	45 56	14 1212	11 1212	33 5048	35 2963	37 7224	***	9	9	0	0
25	45 56	14 0963	11 0963	33 1963	35 5268	37 7116	***	9	9	0	0
26	45 56	14 4942	11 4942	33 5273	35 7960	37 7110	***	9	9	0	0
27	45 56	14 0919	11 0919	33 0960	35 8146	37 7110	***	9	9	0	0
28	45 56	14 0897	11 0897	33 0866	35 8126	37 7110	***	9	9	0	0
29	45 56	14 0874	11 0874	33 5823	35 8184	37 7110	***	9	9	0	0
30	45 56	14 0853	11 0853	33 5853	35 8389	37 7110	***	9	9	0	0
31	45 56	14 0833	11 0833	33 5851	35 8245	37 7110	***	9	9	0	0
32	45 56	14 0817	11 0817	33 5862	35 8312	37 7110	***	9	9	0	0
33	45 56	14 0796	11 0796	33 5826	35 8417	37 7109	***	9	9	0	0
34	45 56	14 0775	11 0775	33 5824	35 8540	37 7042	***	9	9	0	0
35	45 56	14 0754	11 0754	33 5779	35 8654	37 6981	***	9	9	0	0
36	45 56	14 0734	11 0734	33 5873	35 8635	37 7063	***	9	9	0	0
37	45 56	14 0715	11 0715	33 6043	35 8728	37 7220	***	9	9	0	0
38	45 56	14 0826	11 0826	33 5957	35 8749	37 7248	***	9	9	0	0
39	45 56	14 0830	11 0830	33 5987	35 8827	37 7258	***	9	9	0	0
40	45 56	14 0831	11 0831	33 6050	35 9173	37 7367	***	9	9	0	0
41	45 56	14 0849	11 0849	33 6079	35 9068	37 7380	***	9	9	0	0
42	45 56	14 0873	11 0873	33 6052	35 9058	37 7380	***	9	9	0	0
43	45 56	14 0896	11 0896	33 6046	35 9042	37 7380	***	9	9	0	0
44	45 56	14 0920	11 0920	33 5985	35 9924	37 7386	***	9	9	0	0
45	45 56	14 0944	11 0944	33 5912	35 2122	37 7416	***	9	9	0	0
46	45 56	14 1132	11 1032	33 5282	35 9246	37 7499	***	9	9	0	0
47	45 56	14 1080	11 1080	33 5214	35 9346	37 7510	***	9	9	0	0
48	45 56	14 1264	11 1264	33 5168	35 9568	37 8120	***	9	9	0	0
49	45 56	14 1512	11 1512	33 5168	35 9523	37 8130	***	9	9	0	0
50	45 56	14 1181	12 1181	34 1288	36 1911	39 2386	***	9	9	0	0
51	45 56	14 1353	12 1353	34 1481	36 1424	39 2250	***	9	9	0	0
52	45 56	14 1398	12 1398	34 1475	36 1286	39 2250	***	9	9	0	0
53	45 56	14 1324	12 1324	34 1492	36 2402	39 2250	***	9	9	0	0
54	45 56	14 1349	12 1349	34 1575	36 2027	39 2857	***	9	9	0	0
55	45 56	14 1508	12 1508	34 1754	36 2515	39 3200	***	9	9	0	0
56	45 56	14 1565	12 1565	34 1779	36 2192	39 3279	***	9	9	0	0
57	45 56	14 1542	12 1542	34 1829	36 2493	39 3217	***	9	9	0	0
58	45 56	14 1815	12 1815	34 1651	36 2295	39 3391	***	9	9	0	0
59	45 56	14 1815	12 1815	34 1600	36 2430	39 3410	***	9	9	0	0
60	45 56	14 1815	12 1815	34 1681	36 2627	39 3410	***	9	9	0	0
61	45 56	14 1815	12 1815	34 1657	36 2435	39 3410	***	9	9	0	0
62	45 56	14 1815	12 1815	34 1657	36 2504	39 3410	***	9	9	0	0
63	45 56	14 1815	12 1815	34 1657	36 3522	39 3453	***	9	9	0	0
64	45 56	14 1815	12 1815	34 1657	36 2928	39 3537	***	9	9	0	0
65	45 56	14 1815	12 1815	34 1724	36 1590	39 3549	***	9	9	0	0
66	45 56	14 1815	12 1815	34 1805	36 2454	39 3549	***	9	9	0	0
67	45 56	14 1815	12 1815	34 1833	36 2692	39 3670	***	9	9	0	0
68	45 56	14 1815	12 1815	34 1833	36 3108	39 3670	***	9	9	0	0
69	45 56	14 1815	12 1815	34 1833	36 3403	39 3670	***	9	9	0	0
70	45 56	14 1815	12 1815	34 1871	36 3222	39 3674	***	9	9	0	0
71	45 56	14 1815	12 1815	34 1724	36 1590	39 3549	***	9	9	0	0
72	45 56	14 1815	12 1815	34 1805	36 2454	39 3549	***	9	9	0	0
73	45 56	14 1815	12 1815	34 1833	36 2692	39 3670	***	9	9	0	0
74	45 56	14 1815	12 1815	34 1833	36 3108	39 3670	***	9	9	0	0
75	45 56	14 1815	12 1815	34 1833	36 3403	39 3670	***	9	9	0	0
76	45 56	14 1831	12 1831	34 1871	36 3222	39 3674	***	9	9	0	0
77	45 56	14 1831	12 1831	34 1852	36 1005	39 3670	***	9	9	0	0

MAXIMUM DEPTH OF CAST = 77 01M

DEPTH BIN AVERAGED CTD DATA

START TIME = 1940-01-30 00:00 POSITION = 40 35.15N 097 57.79W  
DIA. NO. = 7 LOW TIDE INST. NO. = 1000 HYPACK NO. = 1  
BIN SIZE = 1.0M DEPTHS = TOP = 0.0M BOTTOM = 100.0M SURFACE PRES = 1.000BAR

RIN NO	DBAR M	FAST-T		ACCU'R-T		SAL PPT	SIGMA-T G/CM <sup>3</sup>	COND MM/CM	VEL M/SEC	NU TOTAL	POINTS/BTN USED	WILD	
		DEG-C	DEG-C	DEG-C	DEG-C								
31	46	19	4228	18	4228	33	2125	23	4224	44	2040	*****	
	1	100	4215	19	4215	33	2126	23	4282	44	2034	*****	
	3	55	19	4215	19	4215	33	2010	23	8245	44	1900	*****
	4	58	18	4145	18	4145	33	1971	23	8270	44	1791	*****
32	5	55	18	3371	18	3371	33	2003	23	8578	44	1994	*****
	2	53	17	1932	17	1932	33	1854	23	8882	43	2540	*****
	2	55	17	6794	17	6794	33	1234	23	9701	43	3896	*****
	10	58	17	3541	17	3541	33	2362	24	1304	43	1991	*****
33	10	54	15	9028	15	9028	33	2909	24	2942	42	8438	*****
	11	51	15	8094	15	8094	33	3291	24	3518	42	2990	*****
	12	55	15	7237	15	7237	33	3676	24	4025	42	2602	*****
	13	57	15	4752	15	4752	33	4376	24	5267	42	5042	*****
34	14	59	15	2789	15	2789	33	5165	24	5333	42	5075	*****
	15	56	15	1266	15	1266	33	5483	24	6949	42	3981	*****
	16	52	15	1003	15	1003	33	5350	24	7446	42	3756	*****
	17	54	15	5104	15	5104	33	8402	25	6688	42	1372	*****
35	18	56	15	4660	15	4660	33	8359	25	9835	42	8988	*****
	19	58	14	8929	14	8929	33	6653	25	9799	41	3556	*****
	20	54	14	3896	14	3896	33	5591	25	1861	40	8713	*****
	21	21	14	1772	14	1772	33	6502	25	3303	40	8613	*****
36	21	53	13	3544	13	3544	33	5567	25	3093	40	3839	*****
	22	53	13	7128	13	7128	33	5991	25	3281	40	2763	*****
	23	57	13	5695	13	5695	33	7177	25	4209	40	1616	*****
	24	57	13	4186	13	4186	33	7747	25	5097	40	804	*****
37	25	55	13	4154	13	4154	34	0048	25	6822	40	3219	*****
	26	52	12	8692	12	8692	34	1013	25	8668	39	9069	*****
	27	54	12	1304	12	1304	34	1392	25	7265	39	1463	*****
	28	56	11	9519	11	9519	34	0043	25	9862	38	9433	*****
38	29	58	11	9519	11	9519	34	0043	25	9862	38	9433	*****
	30	55	11	9089	11	9089	33	9858	25	9836	38	8844	*****
	31	52	11	8527	11	8527	33	9723	25	9957	38	8183	*****
	32	54	11	8166	11	8166	33	9837	26	9325	38	7267	*****
39	33	55	11	8195	11	8195	33	9868	26	1083	38	8030	*****
	34	57	11	8195	11	8195	33	9738	26	1086	38	7901	*****
	35	59	11	8208	11	8208	33	9750	26	9274	38	7930	*****
	36	56	11	8276	11	8276	33	9732	26	9213	38	7980	*****
40	37	56	11	8349	11	8349	33	9714	26	9299	38	8033	*****
	38	55	11	8423	11	8423	33	9877	26	9390	38	8274	*****
	39	57	11	8603	11	8603	34	0041	26	9444	38	8615	*****
	40	57	11	8904	11	8904	34	0332	26	9771	38	9700	*****
41	41	54	11	9253	11	9253	34	0475	26	9896	38	9678	*****
	42	50	11	9544	11	9544	34	0483	26	9881	38	9963	*****
	43	52	11	9685	11	9685	34	0595	26	9871	39	824	*****
	44	54	11	9852	11	9852	34	0642	26	9958	39	0424	*****
45	45	53	12	0034	12	0034	34	0828	26	1063	39	8790	*****
	46	50	12	0065	12	0065	34	0893	26	1327	39	8890	*****
	47	50	12	0073	12	0073	34	0961	26	1352	39	9729	*****
	48	52	12	0246	12	0246	34	1020	26	1302	39	110	*****
49	49	54	12	0389	12	0389	34	0996	26	1259	39	1313	*****
	50	56	12	0389	12	0389	34	0996	26	1259	39	1313	*****
51	50	58	12	3565	12	3565	34	1089	26	1485	39	1580	*****
	51	56	12	3690	12	3690	34	1191	26	1473	39	1406	*****
	52	53	12	3700	12	3700	34	1351	26	1259	39	1945	*****
	53	51	12	3840	12	3840	34	1308	26	1817	39	2077	*****
54	54	52	12	1038	12	1038	34	1252	26	1768	39	2209	*****
	55	52	12	1038	12	1038	34	1252	26	1768	39	2209	*****

## DEPTH BIN AVERAGED CTD DATA

CAST NO.		START TIME	194/0222Z	POSITION	40 34 9.5N	TIME	15 49W	INST NO.		TIME NO.		SURFACE PRESS = 1000 mb	
		LOW	HIGH	DEPTHS	TOP =	2M	BOTTOM =	100	90	80	70	60	50
BIN NO		DBAR M	FAST-T DFG-C	ACCU-T DFG-C	SAL PPT	STGMA-T G/CNM*43	COND MM/CM	VEL M/SFC	NO TOTAL	PRINCIPAL BIN	USED	WIND	
1	1	22	16 5840	16 5840	32 2794	24 0845	42 1722	14	225	73	9		
2	1	25	16 7865	16 7865	32 3983	24 0576	42 3932	14	128	20	20		
3	1	24	16 8236	16 8236	32 3711	24 0326	42 3924	14	211	20	20		
4	1	23	16 7723	16 7723	32 9278	24 0460	42 3504	14	203	20	20		
5	1	28	16 5873	16 5873	32 4563	24 0131	42 2551	14	203	20	20		
6	5	22	16 2564	16 2564	32 9243	24 1421	41 8143	49	201	57	57		
7	7	28	15 8743	15 8743	32 9087	24 0295	41 4341	92	193	56	56		
8	7	28	15 8042	15 8042	32 9592	24 2814	41 4254	32	191	59	59		
9	9	21	15 7516	15 7516	32 9622	24 2981	41 3799	43	191	47	47		
10	9	20	15 5896	15 5896	32 9636	24 3403	41 2300	61	192	47	47		
11	10	28	15 5217	15 5217	32 9715	24 3673	41 1757	38	191	28	28		
12	11	29	15 3733	15 3733	32 9496	24 3892	41 3127	43	192	46	46		
13	12	29	15 9923	15 9923	32 3203	24 4611	40 2693	38	194	43	43		
14	13	27	14 7680	14 7680	32 2684	24 5349	40 4323	33	194	47	47		
15	14	20	14 6809	14 6809	32 3951	24 4867	40 4175	37	194	47	47		
16	15	26	14 5737	14 5737	33 0004	24 6180	40 3240	54	192	47	47		
17	15	26	14 4982	14 4982	32 5917	24 6311	40 2445	31	198	39	39		
18	17	28	13 6730	13 6730	32 2977	24 8133	39 4852	105	202	38	38		
19	18	20	13 3098	13 3098	33 0434	24 9290	39 1990	96	202	38	38		
20	19	21	13 0818	13 0818	33 0826	25 1088	39 0304	32	198	49	49		
21	20	63	12 7345	12 7345	33 1278	25 1150	38 2579	57	194	46	46		
22	21	20	12 3620	12 3620	33 2581	25 3981	38 5510	91	199	39	39		
23	22	23	12 3775	12 3775	33 3558	25 3723	38 5622	23	191	41	41		
24	22	19	12 4491	12 4491	33 4150	25 4030	38 2913	44	193	40	40		
25	24	21	12 5042	12 5042	33 4197	25 4076	38 3518	95	195	45	45		
26	25	71	12 5278	12 5278	33 4397	25 4227	38 3949	72	193	41	41		
27	26	69	12 5826	12 5826	33 4959	25 4641	38 3049	67	196	41	41		
28	27	72	12 6173	12 6173	33 5299	25 5323	39 1461	70	195	42	42		
29	28	73	12 4803	12 4803	33 5273	25 5926	39 1826	75	191	36	36		
30	29	22	12 3041	12 3041	33 8541	25 8085	39 1185	85	199	44	44		
31	30	74	12 1770	12 1770	33 8565	25 8334	39 0025	41	192	59	59		
32	31	64	11 9889	11 9889	33 8332	25 8595	38 2036	105	193	39	39		
33	32	67	11 8594	11 8594	33 8226	25 8404	38 5672	105	193	39	39		
34	33	24	11 7768	11 7768	33 8243	25 9423	38 6484	73	193	38	38		
35	34	77	11 7420	11 7420	33 9244	25 9964	38 5673	73	192	38	38		
36	35	69	11 7119	11 7119	33 9420	26 0136	38 6575	40	195	60	60		
37	36	67	11 6807	11 6807	33 9532	26 0394	38 6402	55	197	45	45		
38	37	73	11 6736	11 6736	33 9228	26 0585	38 5541	70	196	43	43		
39	38	71	11 6729	11 6729	33 9820	26 0610	38 6672	58	198	37	37		
40	39	71	11 6817	11 6817	33 9890	26 0697	38 6789	68	195	35	35		
41	40	72	11 6819	11 6819	33 2915	26 1811	38 6672	94	191	29	29		
42	41	73	11 6886	11 6886	34 0016	26 1029	38 5992	75	192	38	38		
43	42	64	11 7036	11 7036	34 0108	26 1029	38 7229	103	193	29	29		
44	43	69	11 7021	11 7021	34 0095	26 1096	38 7207	105	193	28	28		
45	44	72	11 7038	11 7038	34 0113	26 1050	38 7246	11	194	23	23		
46	45	73	11 7036	11 7036	34 0123	26 1259	38 7259	105	192	29	29		
47	46	77	11 7121	11 7121	34 0186	26 1326	38 7412	55	192	48	48		
48	47	64	11 7128	11 7128	34 0183	26 1390	38 7413	56	192	48	48		
49	48	68	11 7186	11 7186	34 0239	26 1326	38 7530	57	191	39	39		
50	49	72	11 7236	11 7236	34 0258	26 1453	38 7601	31	198	36	36		
51	50	78	11 7243	11 7243	34 0257	26 1522	38 7611	48	193	53	53		
52	51	69	11 7256	11 7256	34 0267	26 1597	38 7629	54	196	50	50		
53	52	72	11 7272	11 7272	34 0268	26 1662	38 7652	57	195	47	47		
54	53	72	11 7294	11 7294	34 0281	26 1635	38 7696	45	195	55	55		
55	54	63	11 7378	11 7378	34 0327	26 1670	38 7924	13	199	411	411		
56	55	75	11 7379	11 7379	34 0328	26 1795	38 7832	63	199	45	45		

MAXIMUM DEPTH OF CAST = 56 20m

## DEPTH IN AVERAGE CTD DATA

START TIME 19410307 POSITION 40 39 70N 17 13 77W										
STA NO	LOW NO	IS INST	NO	TAPE NO	1	BTM SIZE = 1.0M DEPTHS TOP = 4M BOTTOM = 100.0M SURFACE PRESS = 1013.0MBAR				
BTM NO	DBAR	FAST-T	ACCU-T	SNL	SEGMENT	COND	VEL	WT	PCNTS BY	TIME
	M	DEG-C	DEG-C	PPT	GND XXXX3	BAUTM	MSEC	MM	PERCENT	MIN
1	1 24	11 4034	11 4034	32 5839	24 9283	32 1773	19	1.4	1	1
2	1 21	11 4198	11 4198	32 5279	24 9233	32 1802	14	1.3	1	1
3	1 28	11 3605	11 3605	32 5990	24 9255	32 1538	14	1.2	1	1
4	1 83	11 4026	11 4026	32 5803	24 9380	32 1741	14	1.1	1	1
5	1 46	11 4147	11 4147	32 5751	24 9379	32 0801	14	1.0	1	1
6	5 78	11 3909	11 3909	32 5971	24 9231	32 0873	20	1.3	1	1
7	6 89	11 3985	11 3985	32 7371	24 9283	32 0804	20	1.2	1	1
8	7 96	11 4278	11 4278	32 5224	24 9483	32 1714	14	1.1	1	1
9	8 26	11 4323	11 4323	32 5258	24 9154	32 1473	14	1.0	1	1
10	9 90	11 4412	11 4412	32 5458	24 9352	32 0762	19	1.2	1	1
11	10 95	11 4545	11 4545	32 5312	24 9261	32 0738	29	1.1	1	1
12	11 83	11 3636	11 3636	32 5300	24 9452	32 0711	46	1.1	1	1
13	12 88	11 3502	11 3502	32 7304	24 9488	32 0714	46	1.1	1	1
14	13 92	11 3668	11 3668	32 7546	24 9597	32 1403	46	1.1	1	1
15	14 92	11 2429	11 2429	32 7456	24 1718	32 0614	33	1.1	1	1
16	15 88	11 2275	11 2275	32 7434	25 0783	36 0654	38	1.1	1	1
17	16 92	11 3138	11 3138	32 7217	25 0887	36 0924	59	1.1	1	1
18	17 95	11 3446	11 3446	32 7862	25 1991	36 1353	23	1.1	1	1
19	18 93	11 4582	11 4582	32 8402	25 1291	32 0941	33	1.1	1	1
20	19 85	11 3985	11 3985	32 8604	25 1623	32 2665	50	1.1	1	1
21	20 93	11 3335	11 3335	32 9151	25 2291	32 2576	85	1.1	1	1
22	21 96	11 3626	11 3626	32 9802	25 2567	32 3511	29	1.1	1	1
23	22 92	11 2626	11 2626	32 2578	25 2115	32 3429	22	1.1	1	1
24	23 79	11 6806	11 6806	32 2069	25 3208	32 0227	41	1.1	1	1
25	24 88	11 4933	11 4933	32 2285	25 4534	32 2256	39	1.1	1	1
26	25 92	11 3840	11 3840	32 2520	25 4951	32 0478	29	1.1	1	1
27	26 93	11 2827	11 2827	32 2809	25 5407	32 5848	76	1.1	1	1
28	27 87	11 2094	11 2094	32 3235	25 5863	32 5612	20	1.1	1	1
29	28 87	11 1511	11 1511	32 3466	25 5201	32 5408	26	1.1	1	1
30	29 92	11 1317	11 1317	32 3693	25 6540	32 5372	19	1.1	1	1
31	30 91	11 1074	11 1074	33 3929	25 5776	32 5391	47	1.1	1	1
32	31 99	11 0967	11 0967	33 4071	25 5982	32 5441	81	1.1	1	1
33	32 82	11 0903	11 0903	33 4216	25 2024	32 5532	81	1.1	1	1
34	33 93	11 0885	11 0885	33 4447	25 7321	32 5153	96	1.1	1	1
35	34 95	11 0815	11 0815	33 4586	25 7470	32 5833	81	1.1	1	1
36	35 95	11 0812	11 0812	33 4823	25 7733	32 6073	53	1.1	1	1
37	36 88	11 0902	11 0902	33 5223	25 4097	32 5568	59	1.1	1	1
38	37 92	11 0935	11 0935	33 5253	25 8141	32 6629	51	1.1	1	1
39	38 86	11 0890	11 0890	33 5115	25 8114	32 6453	39	1.1	1	1
40	39 90	11 0887	11 0887	33 5106	25 8167	32 6445	77	1.1	1	1
41	40 94	11 0894	11 0894	33 5122	25 8189	32 5472	88	1.1	1	1
42	41 96	11 0993	11 0993	33 5429	25 8525	32 5139	29	1.1	1	1
43	42 94	11 1062	11 1062	33 5852	25 8673	32 7122	32	1.1	1	1
44	43 91	11 1155	11 1155	33 5868	25 8846	32 7477	67	1.1	1	1
45	44 97	11 1270	11 1270	33 6195	25 9179	32 7917	53	1.1	1	1
46	45 88	11 1328	11 1328	33 6323	25 9276	32 8103	49	1.1	1	1
47	46 90	11 1339	11 1339	33 6334	25 9332	32 8129	54	1.1	1	1
48	47 94	11 1370	11 1370	33 6412	25 9488	32 8146	57	1.1	1	1
49	48 89	11 1388	11 1388	33 6450	25 9600	32 8236	59	1.1	1	1
50	49 76	11 1415	11 1415	33 6509	25 9636	32 8388	77	1.1	1	1
51	50 92	11 1419	11 1419	33 6494	25 9727	32 8580	21	1.0	1	1
52	51 94	11 1430	11 1430	33 6505	25 9742	32 8708	45	1.0	1	1
53	52 94	11 1421	11 1421	33 6503	25 9324	32 8410	51	1.0	1	1
54	53 97	11 1425	11 1425	33 6508	25 9848	32 8413	47	1.0	1	1

MAXIMUM DEPTH OF CAST = 54 42M

## DEPTH BIN AVERAGED CTD DATA

START TIME		194/0343Z		POSITION		40 40 00N	89 19 00W		
STA NO	LOW NO	HIGH NO	INST NO	DEPTH	TOP	2M. BOTTOM =	100 0M	SURFACE PRES = 1000BAR	
		BIN SIZE = 100M DEPTHS							
BIN NO	DRAR M	FAST-T DEG-C	ACCU-T DEG-C	SAL PPT	SIGMA-T G/CM**3	COND MM/CM	VEL M/SEC	NO TOTAL POINTS/BIN USED	WTLD
1	00	11 5052	11 5052	32 3161	24 5234	36 7937	.65	133	19
2	22	11 4993	11 4993	32 3168	24 5239	36 7689	.19	1067	58
3	62	11 4833	11 4833	32 3175	24 5302	36 7705	.75	41	46
4	75	11 5149	11 5149	32 3164	24 5359	36 8034	.73	44	43
5	466	11 4165	11 4165	32 3205	24 5277	36 8896	.35	121	84
6	573	11 3169	11 3169	32 3101	24 5766	36 6210	.65	50	42
7	76	11 2381	11 2381	32 3246	24 7044	36 6200	.44	39	37
8	62	11 2264	11 2264	32 3319	24 7187	36 6694	.46	59	59
9	68	11 2063	11 2063	32 3380	24 7319	36 7010	.30	52	50
10	72	11 1897	11 1897	32 3429	24 7439	36 5427	.70	46	40
11	74	11 1726	11 1726	32 3486	24 7547	36 5310	.70	43	40
12	70	11 1624	11 1624	32 3551	24 7706	36 5315	.47	28	21
13	93	11 1538	11 1538	32 3613	24 7810	36 5732	.46	35	30
14	23	11 1532	11 1532	32 3782	24 8008	36 5976	.94	39	37
15	426	11 1568	11 1568	32 4226	24 8331	36 4903	1.09	39	37
16	526	11 1626	11 1626	32 4818	24 3846	36 5618	.77	39	38
17	19	11 1549	11 1549	32 5402	24 9363	36 7149	.30	56	49
18	52	11 1461	11 1461	32 5732	24 9680	36 7405	1.04	29	23
19	28	11 1307	11 1307	32 5991	25 0025	36 7633	1.17	37	35
20	28	11 1037	11 1037	32 6512	25 0473	36 7822	1.05	30	30
21	79	11 1052	11 1052	32 7190	25 1975	36 8525	.44	59	55
22	50	11 1133	11 1133	32 7513	25 1281	36 8930	.48	24	20
23	70	11 1179	11 1179	32 7626	25 1412	36 9088	.43	34	32
24	72	11 1338	11 1338	32 8034	25 1282	36 9648	.81	38	34
25	73	11 1478	11 1478	32 8317	25 2023	37 0066	.63	49	43
26	59	11 1509	11 1509	32 8330	25 2083	37 0110	.77	48	39
27	71	11 1613	11 1613	32 8544	25 2296	37 0425	.83	37	35
28	76	11 1716	11 1716	32 8802	25 2509	37 0783	.46	52	48
29	55	11 1816	11 1816	32 9086	25 2837	37 1150	.67	56	55
30	67	11 1951	11 1951	32 9392	25 2990	37 1601	.96	32	30
31	74	11 2114	11 2114	32 9749	25 3301	37 2110	.96	32	29
32	71	11 2195	11 2195	32 9911	25 3502	37 2358	.72	43	41
33	67	11 3270	11 3270	32 0103	25 3642	37 2624	.46	34	33
34	69	11 3579	11 3579	32 0990	25 4373	37 3808	.49	49	47
35	69	11 2814	11 2814	33 1291	25 4598	37 4331	.35	37	34
36	72	11 2920	11 2920	33 1544	25 4780	37 4689	.79	38	32
37	71	11 2965	11 2965	33 1682	25 5005	37 4824	.24	45	42
38	74	11 2975	11 2975	33 1900	25 5194	37 5108	.66	55	52
39	70	11 2991	11 2991	33 2021	25 5320	37 5250	.55	45	45
40	65	11 2999	11 2999	33 2075	25 5452	37 5317	.85	37	31
41	74	11 3011	11 3011	33 2131	25 5445	37 5389	.67	33	31
42	73	11 3038	11 3038	33 2178	25 5462	37 5446	.83	36	31
43	73	11 3031	11 3031	33 2231	25 5472	37 5518	.39	44	40
44	86	11 3036	11 3036	33 2251	25 5720	37 5545	.70	45	43
45	72	11 3046	11 3046	33 2393	25 5854	37 5704	.86	35	33
46	83	11 3042	11 3042	33 2492	25 5938	37 5805	.29	108	27
47	65	11 3033	11 3033	33 2512	25 5125	37 5820	.51	38	33
48	78	11 3029	11 3029	33 2542	25 6151	37 5852	.18	233	23
49	85	11 3015	11 3015	33 2583	25 5185	37 5845	.14	193	21

MAXIMUM DEPTH OF CAST = 49 24M

## DEP &amp; BIN AVERAGED CTD DATA

BIN NO	DRAR NO	CAST - T		ACCLR - T		SAL ZPT	SICMA - T	COND MM/CM	VEL M/MIN	NH TOTAL	PLATES/IN TOT/100	WLD				
		DRG - D	DEG - D	DRG - D	DEG - D											
1	73	12	3533	12	3533	31	5983	24	2932	36	7938	14	198	35	0	
13	73	12	1981	12	1971	31	5995	24	2905	36	5430	22	141	199	0	
14	94	11	9854	11	9854	31	6397	24	4202	36	5234	19	150	104	0	
3	76	11	7733	11	7733	31	6923	24	1058	36	5918	33	94	21	0	
4	67	11	7039	11	7039	31	7173	24	1418	36	3563	52	51	33	0	
5	74	11	5526	11	5526	31	7377	24	1721	36	5329	37	86	34	0	
9	58	11	2141	11	2041	31	7628	24	3088	36	7215	29	116	23	0	
7	21	11	2245	11	2245	31	8521	24	3223	36	4516	1	19	200	0	
3	23	11	2253	11	2249	31	8525	24	3223	36	4516	29	53	23	0	
10	62	11	5748	11	5748	31	8305	24	3772	36	4613	21	154	59	0	
11	10	74	11	5528	11	5528	31	9459	24	2956	36	3524	57	55	47	0
12	11	86	11	5625	11	5625	31	8567	24	3098	36	3782	42	71	200	0
13	12	72	11	5623	11	5623	31	8667	24	3204	36	3887	43	71	200	0
14	13	74	11	5363	11	5363	31	8761	24	3381	36	3758	33	95	23	0
15	14	68	11	5273	11	5273	31	8899	24	3550	36	3824	47	67	38	0
16	15	24	11	5263	11	5263	31	8992	24	3671	36	3916	53	55	47	0
17	19	59	11	2260	11	2260	31	9043	24	3740	36	3973	29	49	55	0
18	19	59	11	2260	11	2150	31	9140	24	3938	36	3974	29	39	55	0
19	18	73	11	3236	11	3143	31	9226	24	4020	36	4063	25	111	55	0
20	19	68	11	5075	11	5075	31	9320	24	4165	36	4101	65	49	41	0
21	20	75	11	5090	11	5090	31	9378	24	4258	36	4178	46	57	54	0
22	21	70	11	5084	11	5084	31	9439	24	4334	36	4239	38	84	53	0
23	22	70	11	5072	11	5072	31	9500	24	4449	36	4294	46	75	56	0
24	23	70	11	5066	11	5066	31	9556	24	4569	36	4351	33	98	52	0
25	24	71	11	5059	11	5059	31	9607	24	4621	36	4411	69	45	43	0
26	25	76	11	5040	11	5040	31	9647	24	4704	36	4429	60	51	43	0
27	26	61	11	5002	11	5002	31	9488	24	4830	36	4442	24	124	80	0
28	29	70	11	4978	11	4978	31	9756	24	4919	36	4495	73	42	40	0
29	28	80	11	4962	11	4962	31	9683	24	4921	36	4411	45	78	58	0
30	29	69	11	4970	11	4970	31	9725	24	5012	36	4465	39	79	54	0
31	30	68	11	4946	11	4946	31	9767	24	5083	36	4490	50	62	50	0
31	31	60	11	4962	11	4962	31	9963	24	5268	36	4708	20	159	28	0
33	32	76	11	4972	11	4972	32	0249	24	5507	36	5015	50	60	53	0
34	33	83	11	4973	11	4973	33	0305	24	5640	36	5028	09	345	24	0
35	34	80	11	4915	11	4915	32	0357	24	5697	36	5084	16	192	118	0

MAXIMUM DEPTH OF CAST = 35.22m

## DEPTH BIN AVERAGED CTD DATA

START TIME 194/22587 POSITION 40 45 24N 07 35 36W  
 STA NO 7 1W NO 18 INST NO TAPE NO  
 BIN SIZE = 1.0M DEPTHS TOP = 2M BOTTOM = 100.0M SURFACE PRES = 1.0DBAR

BIN NO	DEBAR m	FAST-T DEG-C	ACQUA-T DEG-C	SAL PPT	SIGMA-T G/TMAX3	COND MM/CM	VEL M/SEC	NO TOTAL	POINTS/BIN USED	WELL
1	1.00	17 1264	17 1254	31 5554	23 2479	41 1553	.24	97	11	N
2	1.77	16 5728	16 5728	31 8820	23 2362	40 8928	.11	97	65	3
3	2.54	15 2713	15 2713	31 9457	23 3747	40 7483	.19	159	64	3
4	3.32	15 9075	15 9075	31 9731	23 4822	40 4657	.40	120	71	0
5	4.09	15 5224	15 5224	31 9528	23 5345	40 1239	.03	36	16	0
6	5.51	15 1299	15 1299	31 9292	23 6281	39 6494	.23	142	36	0
7	2.25	14 4634	14 4634	31 9546	23 7954	37 4735	.58	13	13	0
8	3.81	13 2782	13 2782	31 9552	23 2151	38 3021	.72	153	48	0
9	9.08	12 6910	12 6910	32 0108	24 1685	37 2192	.99	32	31	4
10	10.74	12 1661	12 1661	31 9264	24 2508	36 2848	.15	28	26	3
11	11.79	11 5087	11 5087	32 0406	24 4686	36 5190	.20	49	46	3
12	12.54	11 3650	11 3650	32 1192	24 5539	36 4706	.36	36	32	3
13	13.73	11 2352	11 2352	32 1358	24 5922	36 5744	.93	33	32	0
14	14.82	11 0548	11 0548	32 1533	24 5473	36 3325	.32	30	32	0
15	15.53	10 9521	10 9521	32 1821	24 5897	36 1710	.46	27	46	3
16	15.70	10 3924	10 3924	32 1909	24 7180	36 1275	.18	25	25	0
17	17.26	10 8623	10 8623	32 1972	24 7256	36 1072	.98	36	36	0
18	18.63	10 8530	10 8530	32 2059	24 7385	36 1084	.24	26	26	0
19	19.69	10 8219	10 8219	32 2115	24 7530	36 0870	.22	26	26	0
20	20.73	10 8062	10 8062	32 2136	24 7646	36 0757	.34	23	23	0
21	21.78	10 8008	10 8008	32 2167	24 7750	36 0744	.93	34	33	0
22	22.21	10 8032	10 8032	32 2179	24 7759	36 0785	.24	151	21	0
23	23.74	10 7832	10 7832	32 2190	24 7846	36 0620	.96	32	32	0
24	24.76	10 7834	10 7834	32 2202	24 7914	36 0638	.93	33	32	0
25	25.80	10 7881	10 7881	32 2215	24 7979	36 0527	.40	28	51	0
26	26.63	10 7839	10 7839	32 2215	24 8017	36 1653	.53	58	48	0
27	27.89	10 7790	10 7790	32 2215	24 8021	36 1623	.91	34	34	0
28	28.71	10 7787	10 7787	32 2215	24 8158	36 1657	.20	45	45	0
29	29.67	10 7810	10 7810	32 2231	24 8187	36 1660	.36	89	94	0
30	30.58	10 7755	10 7755	32 2223	24 8228	36 1614	.86	35	32	0
31	31.73	10 7747	10 7747	32 2230	24 8312	36 0617	.46	36	36	0
32	32.80	10 7750	10 7750	32 2235	24 8417	36 0532	.20	154	154	0
33	33.83	10 7724	10 7724	32 2238	24 8429	36 0614	.14	232	233	0
34	34.65	10 7706	10 7706	32 2245	24 8451	36 0610	.32	93	93	0
35	35.57	10 7674	10 7674	32 2255	24 8560	36 0525	.18	168	49	0
36	36.75	10 7652	10 7652	32 2251	24 8602	36 0560	.15	159	43	0
37	37.83	10 7646	10 7646	32 2245	24 8645	36 0582	.12	183	43	0
38	38.67	10 7660	10 7660	32 2267	24 8670	36 0603	.22	738	738	0
39	39.81	10 7660	10 7660	32 2264	24 8811	36 0608	.14	114	109	0

MAXIMUM DEPTH OF CHART = 40 100

## DEPTH IN METERS AVERAGED TTO DATA

BIN NO	DEBAR M	FAST-T DEG-C	ACCU-R-T DEG-C	SAL PPT	SIGMAR-T 15 DEGREES	CFLD MM CM	VFL MM SEC	NUMBER		
								NO.	DEPTHS	SURFACE PRESSURE
1	2 07	14 9951	14 9951	31 H897	23 5494	36 4802	16	107	107	0
2	3 05	14 9210	14 9210	31 H74	23 4729	36 5525	80	141	141	0
3	4 00	13 7639	13 7639	31 H208	23 5120	36 5911	81	141	141	0
4	4 99	13 0246	13 0246	31 H752	23 9483	36 5826	81	37	37	0
5	6 07	12 1870	12 1870	32 0166	24 2905	36 6948	70	44	44	0
6	5 93	11 8874	11 8874	32 1037	24 4177	36 9182	21	146	74	0
7	3 05	11 9501	11 9501	32 1477	24 4288	36 7523	10	128	72	0
8	8 99	11 4325	11 4325	32 1559	24 5514	36 5681	19	159	32	0
9	10 02	11 3410	11 3410	32 1920	24 2148	36 5292	103	30	30	0
10	11 12	11 2883	11 2883	32 2080	24 6274	36 4939	21	62	51	0
11	11 88	11 1962	11 1962	32 1975	24 6405	36 4824	35	87	20	0
12	13 02	11 1538	11 1538	32 1998	24 7500	36 5668	75	41	32	0
13	14 00	11 1590	11 1590	32 1923	24 5275	36 5929	23	32	32	0
14	14 99	11 1208	11 1208	32 2195	24 6660	36 7584	85	31	31	0
15	15 06	11 1244	11 1244	32 2237	24 5923	36 3662	25	25	25	0
16	17 16	11 1298	11 1298	32 2289	24 7404	36 3747	20	143	52	0
17	17 95	11 1327	11 1327	32 2392	24 7095	36 3799	90	35	34	0
18	19 02	11 1385	11 1385	32 2326	24 7193	36 3890	96	32	31	0
19	20 05	11 1443	11 1443	32 2359	24 7211	36 3972	31	22	22	0
20	20 96	11 1496	11 1496	32 2411	24 7051	36 4083	59	53	49	0
21	23 10	11 1549	11 1549	32 2453	24 7360	36 4177	68	44	30	0
22	23 90	11 1588	11 1588	32 2475	24 7295	36 4239	70	96	32	0
23	25 98	11 1627	11 1627	32 2515	24 7521	36 4318	70	44	32	0
24	25 99	11 1641	11 1641	32 2621	24 7602	36 4443	58	56	45	0
25	26 97	11 0764	11 0764	32 2927	24 8020	36 3976	34	90	54	0
26	26 99	10 9549	10 9549	32 3184	24 8526	36 3159	75	40	38	0
27	28 07	10 8950	10 8950	32 3334	24 8726	36 2782	41	75	50	0
28	28 94	10 8662	10 8662	32 3414	24 8898	36 2614	47	57	52	0
29	30 02	10 8395	10 8395	32 3401	24 9021	36 2364	77	40	34	0
30	31 10	10 8128	10 8128	32 3431	24 9170	36 2161	33	94	67	0
31	31 94	10 8249	10 8249	32 3449	24 9232	36 2291	52	59	46	0
32	33 65	10 8089	10 8089	32 3444	24 9240	36 2148	72	40	36	0
33	34 07	10 7874	10 7874	32 3502	24 9408	36 2018	43	77	57	0
34	34 96	10 7835	10 7835	32 3518	24 9459	36 2004	56	56	51	0
35	36 05	10 7793	10 7793	32 3540	24 9529	36 1993	59	52	44	0
36	36 97	10 7769	10 7769	32 3559	24 9578	36 1994	32	97	73	0
37	38 01	10 7760	10 7760	32 3559	24 2601	36 1992	79	49	42	0
38	39 11	10 7754	10 7754	32 3558	24 2653	36 1990	19	104	70	0
39	40 02	10 7753	10 7753	32 3557	24 2724	36 1991	51	194	82	0
40	41 01	10 7756	10 7756	32 3580	24 9813	36 2021	15	194	82	0
41	42 06	10 7765	10 7765	32 3608	24 9926	36 2063	32	95	69	0
42	42 97	10 7765	10 7765	32 3613	24 9912	36 2070	05	596	161	0
43	43 93	10 7763	10 7763	32 3636	24 9944	36 2097	08	596	117	0

MAXIMUM DEPTH OF CAST = 44 52M

## DEPTH BIN AVERAGED CTD DATA

START TIME 195/0011C		POSITION 40 35 15N 09 35 10W		INST NO 1 TYPE NO 1		BIN SIZE = 1.0M DEPTHS TOP = 2M BOTTOM = 130.0M		SURFACE PRES = 1000DBAR		
BIN NO	DEBAR M	FAST-T DEG-C	ACCU-R-T DEG-C	SHL PPT	SIGMA-T D/CM**3	CND MM/CM	VEL CM/SEC	NO TOTAL	POINTS BIN USED	WLD
1	93	12 3212	12 3212	32 2768	24 4417	32 4839	13	131	54	0
1	62	12 4803	12 4803	32 2311	24 3795	32 5795	14	128	84	0
3	39	11 8827	11 8827	32 1874	24 4632	32 9921	11	38	35	0
4	80	11 6158	11 6158	32 2113	24 5356	32 7859	10	54	49	0
4	99	11 4108	11 4108	32 2424	24 6007	32 6353	10	104	51	0
5	72	11 2984	11 2984	32 2767	24 6534	32 5705	1 04	29	29	0
5	79	11 2511	11 2511	32 3904	24 5269	32 5422	17	46	42	0
6	62	11 3206	11 3206	32 4054	24 6973	32 5402	29	105	76	0
7	75	11 3057	11 3057	32 4226	24 6232	32 5409	20	48	47	0
10	75	11 1871	11 1871	32 3411	24 7424	32 5386	52	59	52	0
11	71	11 1833	11 1833	32 3508	24 7544	32 5453	58	53	49	0
12	71	11 1805	11 1805	32 3599	24 7684	32 5525	52	59	49	0
13	63	11 1804	11 1804	32 3589	24 7795	32 5519	34	90	74	0
14	69	11 1826	11 1826	32 3896	24 8004	32 5853	75	42	41	0
15	78	11 1883	11 1883	32 4061	24 8166	32 6076	68	48	44	0
16	71	11 1904	11 1904	32 4144	24 8277	32 6183	41	73	57	0
17	23	11 1881	11 1881	32 4231	24 8401	32 6254	55	57	50	0
18	23	11 1934	11 1934	32 4353	24 8554	32 6341	35	88	82	0
19	69	11 1732	11 1732	32 4546	24 8722	32 6485	44	34	34	0
20	73	11 1745	11 1745	32 4821	24 9034	32 6744	92	36	34	0
21	75	11 1828	11 1828	32 5196	24 9342	32 7203	60	49	40	0
21	58	11 2028	11 2028	32 5006	24 9684	32 7802	24	126	125	0
23	67	11 2185	11 2185	32 5113	25 0122	32 8461	59	31	28	0
24	73	11 2301	11 2301	32 5350	25 0288	32 8810	98	33	32	0
25	78	11 2552	11 2552	32 5817	25 0583	32 9515	22	136	93	0
26	70	11 2672	11 2672	32 7134	25 0993	32 9948	85	37	36	0
26	28	11 2987	11 2987	32 7825	25 1312	32 9735	91	37	35	0
28	75	11 3657	11 3657	32 7983	25 1547	32 1789	43	71	68	0
28	69	11 3488	11 3488	32 8546	25 1843	32 1837	37	50	56	0
30	65	11 5719	11 5719	32 9028	25 2010	32 4651	36	87	69	0
31	70	11 5536	11 5536	32 9232	25 2280	32 4698	77	39	36	0
31	76	11 4903	11 4903	32 9193	25 2404	32 4086	78	44	38	0
33	73	11 3255	11 3255	32 9109	25 2729	32 2511	32	96	79	0
34	67	11 2896	11 2896	32 9526	25 3202	32 2662	57	55	44	0
35	72	11 3820	11 3820	33 0391	25 3678	32 4335	69	45	41	0
36	73	11 4322	11 4322	33 0614	25 3830	32 5023	51	61	54	0
37	68	11 4424	11 4424	33 0641	25 3867	32 5142	37	45	43	0
38	74	11 4965	11 4965	33 1163	25 4238	32 5176	85	38	32	0
39	78	11 4603	11 4603	33 1289	25 4490	32 5979	43	51	51	0
40	65	11 4139	11 4139	33 1243	25 4538	32 5512	37	84	69	0
41	57	11 3583	11 3583	33 1164	25 4704	32 4930	28	48	41	0
42	71	11 3055	11 3055	33 1334	25 4926	32 4624	23	37	35	0
43	70	11 2880	11 2880	33 1518	25 5195	32 4556	98	36	34	0
44	74	11 2628	11 2628	33 1517	25 5220	32 4430	58	53	40	0
45	54	11 2390	11 2390	33 1548	25 5411	32 4349	29	116	73	0
46	69	11 2272	11 2272	33 1802	25 5623	32 4402	1 22	26	25	0
47	72	11 2173	11 2173	33 1934	25 5825	32 4442	1 31	23	23	0
48	81	11 2039	11 2039	33 1974	25 5834	32 4572	24	134	46	0
49	64	11 1852	11 1852	33 1981	25 5921	32 4712	1 10	18	15	0
50	70	11 1645	11 1645	33 2024	25 6042	32 4871	1 40	22	22	0
51	75	11 1356	11 1356	33 2215	25 6240	32 4906	1 37	23	23	0
51	82	11 1381	11 1381	33 2790	25 6650	32 4614	21	150	45	0
52	73	11 1672	11 1672	33 4274	25 6956	32 5328	05	30	29	0
53	27	11 1805	11 1805	33 4506	25 7463	32 5233	86	35	37	0
54	59	11 2004	11 2004	33 5853	25 7649	32 5279	19	155	44	0
55	79	11 2391	11 2391	33 4255	25 7907	32 7036	14	209	46	0
56	77	11 2710	11 2710	33 4821	25 8359	32 7905	13	172	92	0
57	22	11 2903	11 2903	33 5050	25 8608	32 4520	15	206	78	0
58	76	11 3030	11 3030	33 5201	25 8654	32 3593	20	64	59	0

MAXIMUM DEPTH OF CAST = 59.21M

## DEPTH BIN AVERAGED CTD DATA

START TIME = 175.11127 POSITION 44 32 04N 02 22 24W STA NO = 7 DEPTHS TOP = 0M, BOTTOM = 1000M SURFACE PRESS = 1013BAR BIN SIZE = 1.0M										
BIN NO	DBAR M	FAST-T DEG-C	ACCUR-T DEG-C	SAL PPT	SIGMA-T G/cm**3	CNDW MM/MN	VEL M/SEC	NO TOTAL	POINTS/BIN	WLD
1	1.01	13 3353	13 3359	33 1291	24 9521	32 0.292	10	129	30	0
2	1.95	13 5195	13 5195	33 1757	25 0.248	38 4.924	44	73	30	0
3	2.89	13 3521	13 3521	33 1554	25 1.322	38 4.421	52	56	31	0
4	3.84	12 4451	12 4451	33 1936	25 1.403	34 5.528	50	155	31	0
5	4.78	12 5058	12 5058	33 1776	25 1.929	32 5.794	99	31	31	0
6	5.75	12 5280	12 5280	33 1894	25 0.866	38 7.431	90	35	34	0
7	6.69	12 5202	12 5202	33 1567	25 0.644	38 4.020	24	122	24	0
8	7.64	12 5242	12 5242	33 1489	25 0.686	38 7.244	24	23	23	0
9	8.59	12 5375	12 5376	33 1492	25 0.523	38 8.664	1	31	31	0
10	9.54	12 5286	12 5286	33 1647	25 0.431	39 0.176	125	121	64	0
11	10.49	13 1259	13 1259	33 1322	24 9930	34 1.205	99	32	30	0
12	11.44	13 1827	13 1827	33 1109	25 1.690	32 1.548	72	42	30	0
13	12.39	13 5254	13 5254	33 0.220	25 4.521	38 5.011	35	93	33	0
14	13.34	13 5270	13 5270	33 1.352	25 1.937	38 2.581	45	37	37	0
15	14.29	11 4820	11 4820	33 1.364	25 1.718	38 0.015	40	35	33	0
16	15.24	11 5695	11 5696	33 2016	25 3.621	37 2.804	42	71	64	0
17	16.19	11 5275	11 5275	33 1501	25 4.180	37 2.734	41	75	69	0
18	17.14	11 5129	11 5129	33 2195	25 4.502	37 2.903	28	35	31	0
19	18.09	11 5175	11 5175	33 2889	25 4.521	37 3.045	40	40	31	0
20	19.04	11 5241	11 5241	33 2957	25 4.219	37 3.180	52	51	31	0
21	20.99	11 5294	11 5294	33 3111	25 4.852	37 3.389	53	58	48	0
22	21.94	11 5300	11 5300	33 3297	25 6.992	37 3.492	46	71	67	0
23	22.89	11 5260	11 5260	33 3237	25 6.913	37 3.496	57	51	43	0
24	23.84	11 3746	11 3746	33 3399	25 6.948	37 2.276	93	34	33	0
25	24.79	11 3537	11 3537	33 3470	25 6.938	37 2.160	98	35	35	0
26	25.73	11 3422	11 3422	33 3501	25 5.761	37 2.089	28	109	24	0
27	26.68	11 3311	11 3311	33 3539	25 5.927	37 2.030	93	34	30	0
28	27.63	11 3195	11 3195	33 3590	25 5.989	37 5.281	1 14	27	24	0
29	28.58	11 3106	11 3106	33 3721	25 3.184	37 2.036	91	34	32	0
30	29.53	11 3068	11 3068	33 3784	25 6.208	37 2.068	27	113	69	0
31	30.47	11 2912	11 2912	33 4107	25 6.570	37 2.252	1 09	29	28	0
32	31.42	11 2947	11 2947	33 4356	25 6.902	37 2.545	1 02	28	28	0
33	32.37	11 2978	11 2978	33 4513	25 6.922	37 2.237	22	43	41	0
34	33.32	11 2987	11 2987	33 4639	25 7.081	37 2.977	36	92	73	0
35	34.27	11 2994	11 2994	33 4828	25 7.310	37 3.080	73	40	31	0
36	35.22	11 2989	11 2989	33 4925	25 7.420	37 8.178	73	42	39	0
37	36.17	11 2982	11 2982	33 5048	25 7.528	37 8.300	53	50	49	0
38	37.12	11 2979	11 2979	33 5146	25 7.459	37 8.400	62	51	45	0
39	38.07	11 2978	11 2978	33 5266	25 7.838	37 8.466	86	35	35	0
40	39.02	11 2976	11 2976	33 5248	25 7.825	37 8.510	77	41	35	0
41	40.97	11 2975	11 2975	33 5279	25 7.907	37 8.545	31	98	73	0
42	41.92	11 2975	11 2975	33 5303	25 7.953	37 8.573	83	36	31	0
43	42.87	11 2976	11 2976	33 5322	25 8.123	37 8.599	1 13	28	25	0
44	43.82	11 2974	11 2974	33 5360	25 8.120	37 8.639	93	33	25	0
45	44.77	11 2987	11 2987	33 5581	25 8.168	37 8.676	38	89	73	0
46	45.72	11 2979	11 2979	33 5397	25 8.391	37 8.689	48	62	52	0
47	46.67	11 2977	11 2977	33 5431	25 8.313	37 8.725	88	55	32	0
48	47.62	11 2980	11 2980	33 5614	25 8.497	37 8.918	1 01	32	30	0
49	48.57	11 2986	11 2986	33 5741	25 8.686	37 9.052	72	48	46	0
50	49.52	11 2991	11 2991	33 5729	25 8.723	37 9.045	72	97	82	0
51	50.47	11 2991	11 2991	33 4754	25 4721	37 9.042	57	54	45	0
52	51.42	11 2993	11 2993	33 5758	25 8782	37 9.103	29	54	49	0
53	52.38	11 3041	11 3041	33 3779	25 8682	37 9.134	55	38	38	0
54	53.33	11 3009	11 3009	33 5622	25 3893	37 9.156	75	109	93	0
55	54.29	11 3009	11 3009	33 3859	25 8075	37 9.223	76	43	43	0

MAXIMUM DEPTH OF CAST = 55 / 1m

## DEPTH RIN AVERAGED CTD DATA

BIN NO.	DBAR M	FAST-T DEG-C	ACCU-T DEG-C	SLT PPT	SIGMA-T G/CM**3	COND MM/CM	VEL M/SEC	NO TOTAL	PITTING RIN USED	
									NO	WILD
1	92	12 1100	12 1100	32 5020	24 7794	32 5937	24	28	13	0
2	79	11 9526	11 9526	32 5000	24 8424	32 5906	17	180	10	0
3	71	12 0232	12 0232	32 5083	24 8400	32 5933	19	119	10	0
4	69	12 0989	12 0989	32 5041	24 8122	32 7074	48	123	10	0
5	74	12 0538	12 0538	32 5703	24 8147	32 6527	25	113	10	0
6	59	12 0550	12 0550	32 5085	24 8181	32 6523	53	58	10	0
7	57	12 0348	12 0348	32 5723	24 8295	32 5403	24	131	4	0
8	59	12 0499	12 0499	32 5602	24 8293	32 5599	62	48	4	0
9	59	12 0219	12 0219	32 5534	24 8230	32 5410	51	54	5	0
10	70	11 7094	11 7094	32 7469	24 9575	32 4156	51			0
11	10 72	11 5141	11 5141	32 8256	25 0645	32 3259	43	28	57	0
12	11 68	11 5115	11 5115	32 8493	25 0886	32 3480	43	75	58	0
13	12 76	11 5405	11 5405	32 8693	25 1035	32 3953	42			0
14	13 62	11 5323	11 5323	32 8714	25 1091	32 3949	48	24	42	0
15	14 70	11 4791	11 4791	32 8745	25 1281	32 3458	70	45	42	0
16	15 76	11 4345	11 4345	32 8734	25 1386	32 3045	61	46	47	0
17	16 72	11 4073	11 4073	32 8799	25 1531	32 2859	35	35	57	0
18	17 67	11 3484	11 3484	32 8813	25 1729	32 2354	78	44	41	0
19	18 20	11 3389	11 3389	32 9305	25 2153	32 2271	83	37	35	0
20	19 77	11 3796	11 3796	32 9762	25 2490	32 3610	48	35	51	0
21	20 68	11 3795	11 3795	33 0025	25 2764	32 3880	52	58	48	0
22	21 73	11 4279	11 4279	33 0274	25 2935	32 4579	21	38	57	0
23	22 73	11 5074	11 5074	33 0867	25 3253	32 5910	52	39	42	0
24	23 68	11 5812	11 5812	33 1362	25 3563	32 2093	50	63	50	0
25	24 69	11 4845	11 4845	33 2076	25 3941	32 3773	77	40	39	0
26	25 70	11 6983	11 6983	33 2778	25 4513	32 3622	36	32	32	0
27	26 71	11 5846	11 5846	33 3351	25 5247	32 9127	73	43	39	0
28	27 72	11 4289	11 4289	33 3389	25 5327	32 8593	37	55	54	0
29	28 58	11 3933	11 3933	33 3719	25 5959	32 8593	36	36	33	0
30	29 70	11 3849	11 3849	33 3908	25 6208	32 7912	1	19	26	0
31	30 73	11 3572	11 3572	33 4006	25 6377	32 7751	1	05	30	0
32	31 72	11 3307	11 3307	33 4108	25 6526	32 7625	51	59	53	0
33	32 63	11 2936	11 2936	33 4046	25 6579	32 7226	48	54	57	0
34	33 70	11 2857	11 2857	33 4173	25 6736	32 7286	99	35	33	0
35	34 74	11 2868	11 2868	33 4251	25 6873	32 7380	79	34	34	0
36	35 75	11 2786	11 2786	33 4280	25 6954	32 7338	48	60	49	0
37	36 26	11 2649	11 2649	33 4257	25 7020	32 7203	72	40	35	0
38	37 20	11 2270	11 2270	33 4320	25 7224	32 6964	1	104	38	0
39	38 71	11 2429	11 2429	33 4653	25 7438	32 7400	1	14	35	0
40	39 80	11 2540	11 2540	33 4894	25 7731	32 7749	54	57	58	0
41	40 57	11 2551	11 2551	33 5034	25 7814	32 7905	53	93	54	0
42	41 67	11 2436	11 2436	33 5266	25 8032	32 8038	1	10	28	0
43	42 73	11 2349	11 2349	33 5488	25 8367	32 8188	35	24	23	0
44	43 75	11 2338	11 2338	33 5635	25 8486	32 8331	1	02	28	0
45	44 91	11 2354	11 2354	33 5739	25 8550	32 8445	51	51	49	0
46	45 67	11 2413	11 2413	33 5906	25 8717	32 8682	55	56	48	0
47	46 23	11 2515	11 2515	33 6059	25 8919	32 8936	83	32	34	0
48	47 77	11 2633	11 2633	33 6252	25 9069	32 9244	46	52	54	0
49	48 64	11 2777	11 2777	33 6422	25 9305	32 9552	97	45	46	0
50	49 69	11 3041	11 3041	33 6673	25 9423	38 0055	1	14	27	0
51	50 73	11 3279	11 3279	33 4951	25 9573	38 0561	1	10	28	0
52	51 86	11 4120	11 4120	33 2630	26 0106	38 2000	53	45	44	0
53	52 62	11 4431	11 4431	33 2815	26 4150	38 2512	37	44	43	0
54	53 26	11 4227	11 4227	33 3038	26 6396	38 3019	23	38	38	0
55	54 20	11 3263	11 3263	33 9155	26 1023	38 3588	43	38	38	0

MAXIMUM DEPTH OF CAST = 55 21M

## DEPTH RTN AVERAGED CTD DATA

START TIME		195 0246Z		POSITION		40 34 ASN	49 26 SW		
STA NO	LOW NO	INST NO	TYPE NO	DEPTH	TOP	2M	ROTOM = 1000M	SURFACE PRES = 1000DBAR	
1	61	12	1851	12	1851	32	4881	24	5293
3	62	12	1055	12	1055	32	5304	24	5820
5	72	12	1712	12	1712	32	5412	24	5834
7	78	12	1395	12	1395	32	5290	24	5842
9	48	12	2558	12	2558	32	5726	24	2003
10	70	12	3956	11	3966	32	4001	24	7343
11	71	11	3448	11	3448	32	4447	24	8142
12	82	11	3409	11	3409	32	4520	24	8281
13	75	11	194	11	194	32	4551	24	8402
14	64	11	1994	11	1994	32	4610	24	8513
15	62	11	1959	11	1959	32	4640	24	8626
16	64	11	1934	11	1934	32	4664	24	8665
17	74	11	1941	11	1941	32	4687	24	8720
18	73	11	1955	11	1955	32	4881	24	8778
19	55	11	1939	11	1939	32	4726	24	8861
20	71	11	1924	11	1924	32	4799	24	9980
21	79	12	1889	11	1889	32	4893	24	9111
22	73	12	1860	11	1860	32	5026	24	9303
23	26	11	1862	11	1862	32	5217	24	9449
24	26	11	1897	11	1897	32	5407	24	9047
25	21	11	1951	11	1951	32	5586	24	7757
26	26	11	2001	11	2001	32	5624	24	9938
27	52	11	2021	11	2021	32	5829	24	9903
28	59	11	2398	11	2398	32	5987	36	8546
29	57	11	2186	11	2186	32	6288	36	9113
30	57	11	2081	11	2081	32	7253	36	1358
31	71	11	2057	11	2057	32	7597	25	1678
32	75	11	2084	11	2084	32	2858	25	1962
33	24	11	2040	11	2040	32	4235	25	2203
34	73	11	2034	11	2034	32	8780	25	2712
35	72	11	2150	11	2150	32	9051	25	2958
36	73	11	2216	11	2216	32	9412	25	3250
37	26	11	2310	11	2310	33	0048	32	3282
38	20	11	2949	11	2949	33	0965	32	4398
39	23	11	3086	11	3086	33	1695	32	5029
40	75	11	3260	11	3260	33	2222	32	5493
41	73	11	3511	11	3511	33	2651	32	5858
42	73	11	3564	11	3564	33	3103	32	5369
43	29	11	3468	11	3468	33	3705	32	2179
44	58	11	3349	11	3349	33	4001	32	2412
45	58	11	3059	11	3059	33	4586	32	2527
46	73	11	2971	11	2971	33	4901	32	2548
47	52	11	2908	11	2908	33	5055	32	8054
48	73	11	2861	11	2861	33	5126	32	8314
49	26	11	2804	11	2804	33	5327	32	8364
						35	8413	32	8470

MAXIMUM DEPTH OF CAST = 49 2M

## MAY 1961 BIN AVERAGE THERMOS

BIN NO	DRAR M	FAST-T DEG-C		ACQUA-T DEG-C		SAL PPT	STOMAT DEGREES	COND MICROHM	VOL MM SEC	WT G	PRODUCTION	WELL
		NO	NO	NO	NO							
1	1 103	11 2029	11 2029	11 2029	11 2029	32 4323	24 2004	36 2020	1 12	54	4	1
2	1 102	11 2083	11 2083	11 2083	11 2083	32 2550	24 2025	36 2530	1 12	54	4	1
3	1 102	11 4252	11 4252	11 4252	11 4252	32 2552	24 2025	36 2532	1 12	54	4	1
4	1 105	11 4524	11 4524	11 4524	11 4524	32 2599	24 2025	36 2599	1 12	54	4	1
5	1 106	11 4538	11 4538	11 4538	11 4538	32 2682	24 2024	36 2680	1 12	54	4	1
6	1 106	11 4348	11 4348	11 4348	11 4348	32 2692	24 2022	36 2645	1 12	54	4	1
7	1 106	11 3921	11 3921	11 3921	11 3921	32 2744	24 2023	36 2557	1 12	54	4	1
8	1 106	11 3863	11 3863	11 3863	11 3863	32 2809	24 2028	36 2340	1 12	54	4	1
9	1 106	11 3597	11 3597	11 3597	11 3597	32 2814	24 2014	36 2394	1 12	54	4	1
10	1 106	11 3126	11 3126	11 3126	11 3126	32 2880	24 2022	36 5954	1 12	54	4	1
11	1 106	11 2914	11 2914	11 2914	11 2914	32 3050	24 2008	36 5971	1 12	53	43	0
12	1 106	11 2889	11 2889	11 2889	11 2889	32 3148	24 2125	36 2033	1 12	53	43	0
13	1 106	11 2772	11 2772	11 2772	11 2772	32 3204	24 2024	36 3991	1 12	53	43	0
14	1 106	11 2619	11 2619	11 2619	11 2619	32 3249	24 2358	36 5704	1 12	53	43	0
15	1 106	11 2625	11 2625	11 2625	11 2625	32 3343	24 2528	36 5919	1 12	53	43	0
16	1 106	11 2472	11 2472	11 2472	11 2472	32 3402	24 2586	36 5937	1 12	53	43	0
17	1 106	11 2393	11 2393	11 2393	11 2393	32 3449	24 2705	36 5919	1 12	53	43	0
18	1 106	11 2396	11 2396	11 2396	11 2396	32 3492	24 2745	36 5884	1 12	53	43	0
19	1 106	11 2136	11 2136	11 2136	11 2136	32 3579	24 3028	36 5834	1 12	53	43	0
20	1 107	11 2107	11 2107	11 2107	11 2107	32 3620	24 3065	36 5854	1 12	53	43	0
21	1 107	11 2110	11 2110	11 2110	11 2110	32 3650	24 3121	36 5891	1 12	53	43	0
22	1 107	11 2112	11 2112	11 2112	11 2112	32 3695	24 3254	36 5942	1 12	53	43	0
23	1 107	11 2132	11 2132	11 2132	11 2132	32 3749	24 3285	36 6024	1 12	53	43	0
24	1 107	11 2156	11 2156	11 2156	11 2156	32 3779	24 3414	36 6175	1 12	53	43	0
25	1 107	11 2187	11 2187	11 2187	11 2187	32 3801	24 3431	36 6130	1 12	53	43	0
26	1 107	11 2106	11 2106	11 2106	11 2106	32 3819	24 3543	36 6151	1 12	53	43	0
27	1 107	11 2089	11 2089	11 2089	11 2089	32 3823	24 3595	36 6160	1 12	53	43	0
28	1 107	11 2032	11 2032	11 2032	11 2032	32 3833	24 3645	36 6170	1 12	53	43	0
29	1 107	11 2144	11 2144	11 2144	11 2144	32 3879	24 3780	36 6187	1 12	53	43	0
30	1 107	11 2136	11 2136	11 2136	11 2136	32 3904	24 3841	36 6210	1 12	53	43	0
31	1 107	11 2111	11 2111	11 2111	11 2111	32 3929	24 3834	36 6217	1 12	53	43	0
32	1 107	11 2097	11 2097	11 2097	11 2097	32 3954	24 3882	36 6233	1 12	53	43	0
33	1 107	11 2089	11 2089	11 2089	11 2089	32 4062	24 3950	36 6341	1 12	53	43	0
34	1 107	11 2089	11 2089	11 2089	11 2089	32 4273	24 3982	36 6559	1 12	53	43	0
35	1 107	11 2091	11 2091	11 2091	11 2091	32 4227	24 9229	36 6519	1 12	53	43	0
36	1 107	11 2091	11 2091	11 2091	11 2091	32 4286	24 9366	36 6582	1 12	53	43	0
37	1 107	11 2090	11 2090	11 2090	11 2090	32 4314	24 9422	36 6610	1 12	53	43	0
38	1 107	11 2081	11 2081	11 2081	11 2081	32 4346	24 9570	36 6648	1 12	53	43	0
39	1 107	11 2076	11 2076	11 2076	11 2076	32 4346	24 9549	36 6644	1 12	53	43	0
40	1 107	11 2157	11 2157	11 2157	11 2157	32 4749	25 0168	36 7149	1 12	53	43	0
41	1 107	11 2075	11 2075	11 2075	11 2075	32 4346	24 9694	36 6647	1 12	53	43	0
42	1 107	11 2079	11 2079	11 2079	11 2079	32 4336	24 9657	36 6642	1 12	53	43	0
43	1 107	11 2080	11 2080	11 2080	11 2080	32 4345	24 9659	36 6657	1 12	53	43	0
44	1 107	11 2085	11 2085	11 2085	11 2085	32 4381	24 9795	36 6703	1 12	53	43	0
45	1 107	11 2146	11 2146	11 2146	11 2146	32 4220	25 0072	36 7104	1 12	53	43	0
46	1 107	11 2157	11 2157	11 2157	11 2157	32 4749	25 0168	36 7149	1 12	53	43	0
47	1 107	11 2158	11 2158	11 2158	11 2158	32 4879	25 0326	36 7285	1 12	53	43	0
48	1 107	11 2152	11 2152	11 2152	11 2152	32 5151	25 0582	36 7565	1 12	53	43	0
49	1 107	11 2093	11 2093	11 2093	11 2093	32 5263	25 1103	36 8134	1 12	53	43	0
50	1 107	11 2027	11 2027	11 2027	11 2027	32 6049	25 1373	36 8368	1 12	53	43	0

MAXIMUM DEPTH OF CAST = 50 FTM

## DEPTH RTN AVERAGED CTD DATA

BIN NO	DBAR M	FAST-T DEG-C	ACCUR-T DEG-C	SAL PPT	SIGMA-T G/CM**3	COND MM/CM	VEL M/SEC	NO TOTAL	POTNTS/RTN USED	WILD
1	4 35	12 5740	12 5740	31 2414	23 2750	37 1455	32	5	4	0
4	4 35	12 5745	12 5745	31 2425	23 2805	37 1413	32	44	43	1
5	4 35	12 5733	12 5733	31 2435	23 2862	37 1413	32	44	43	1
9	4 35	12 6751	12 6751	31 2435	23 2997	37 1434	32	44	43	1
9	4 35	12 6752	12 6752	31 2435	23 2997	37 1434	32	44	43	1
8	8 84	12 6853	12 6853	31 2456	23 9997	37 2656	32	36	34	0
10	9 31	12 6862	12 6862	31 2451	24 0042	37 2563	32	37	35	0
10	9 31	12 6849	12 6849	31 2442	24 0052	37 2546	32	37	35	0
11	9 31	12 6843	12 6843	31 2448	24 0134	37 2553	32	37	35	0
10	10 28	12 6844	12 6844	31 2446	24 0189	37 2553	32	37	35	0
11	13 79	12 6845	12 6845	31 2443	24 0247	37 2553	32	41	39	0
12	14 82	12 6754	12 6754	31 2431	24 0284	37 2462	32	42	40	0
13	15 83	12 6700	12 6700	31 2430	24 0345	37 2431	32	42	40	0
14	19 75	12 6688	12 6688	31 2449	24 0425	37 2436	32	42	40	0
15	19 75	12 6684	12 6684	31 2452	24 0501	37 2436	32	42	40	0
16	19 81	12 6680	12 6680	31 2446	24 0482	37 2432	32	34	32	0
17	19 81	12 6671	12 6671	31 2442	24 0554	37 2430	32	32	30	0
18	19 81	12 6680	12 6680	31 2453	24 0560	37 2448	32	32	30	0
19	19 78	12 6691	12 6691	31 2454	24 0719	37 2453	32	29	28	0
20	19 78	12 6690	12 6690	31 2450	24 0662	37 2452	32	29	28	0
21	23 30	12 6690	12 6690	31 2451	24 0842	37 2463	32	39	37	0
23	34 34	12 6687	12 6687	31 2452	24 0813	37 2470	32	40	38	0
23	34 34	12 6684	12 6684	31 2445	24 1841	37 2455	32	40	38	0
24	35 28	12 6674	12 6674	31 2441	24 0912	37 2455	32	34	32	0
25	35 28	12 6670	12 6670	31 2445	24 1906	37 2450	32	34	32	0

MAXIMUM DEPTH OF CAST = 28 31M

## DEPTH RTN AVERAGED CTD DATA

BIN NO	DBAR M	FAST-T DEG-C	ACCUR-T DEG-C	SAL PPT	SIGMA-T G/CM**3	COND MM/CM	VEL M/SEC	NO TOTAL	POTNTS/RTN USED	WILD
1	1 46	12 4651	12 4651	31 8322	24 0728	37 1480	32	5	4	0
4	91	12 4620	12 4620	31 8277	24 0726	37 1408	32	151	88	0
4	95	12 4566	12 4566	31 8295	24 0806	37 1383	40	77	52	0
5	95	12 4569	12 4569	31 8296	24 0858	37 1390	42	66	52	0
5	00	12 4565	12 4565	31 8297	24 0906	37 1390	59	53	45	0
6	01	12 4559	12 4559	31 8300	24 0957	37 1393	46	67	55	0
7	99	12 4556	12 4556	31 8303	24 1020	37 1398	56	49	44	0
7	98	12 4556	12 4556	31 8301	24 1055	37 1400	86	35	30	0
10	10 03	12 4552	12 4552	31 8303	24 1114	37 1403	75	45	38	0
10	10 03	12 4551	12 4551	31 8304	24 1166	37 1407	58	56	50	0
11	10 96	12 4541	12 4541	31 8308	24 1192	37 1407	55	56	46	0
12	10 00	12 4543	12 4543	31 8307	24 1251	37 1415	70	45	43	0
13	10 03	12 4543	12 4543	31 8310	24 1295	37 1415	88	48	44	0
14	14 05	12 4545	12 4545	31 8305	24 1370	37 1420	70	43	37	0
15	15 06	12 4544	12 4544	31 8309	24 1391	37 1427	67	45	39	0
16	16 03	12 4527	12 4527	31 8313	24 1483	37 1420	59	55	51	0
17	17 00	12 4515	12 4515	31 8319	24 1511	37 1420	61	49	46	0
18	18 01	12 4514	12 4514	31 8316	24 1548	37 1420	58	51	45	0
20	20 01	12 4513	12 4513	31 8319	24 1523	37 1427	55	46	41	0
21	21 02	12 4514	12 4514	31 8316	24 1703	37 1433	55	58	48	0
23	34 01	12 4519	12 4519	31 8301	24 1286	37 1440	54	42	43	0
23	34 03	12 4509	12 4509	31 8321	24 1811	37 1439	57	51	51	0
24	33 98	12 4514	12 4514	31 8319	24 1807	37 1442	51	51	50	0
25	36 00	12 4519	12 4519	31 8315	24 1892	37 1452	59	46	43	0
26	26 02	12 4518	12 4518	31 8318	24 1959	37 1459	53	49	46	0
27	28 29	12 4518	12 4518	31 8312	24 2045	37 1454	54	51	49	0
28	28 00	12 4482	12 4482	31 8350	24 2063	37 1469	52	47	51	0
29	29 04	12 4510	12 4510	31 8318	24 2082	37 1470	55	46	43	0
30	30 04	12 4510	12 4510	31 8320	24 2179	37 1470	34	46	43	0
31	30 26	12 4518	12 4518	31 8318	24 2155	37 1470	47	38	34	0
32	30 26	12 4524	12 4524	31 8318	24 2208	37 1470	23	48	38	0
33	33 08	12 4529	12 4529	31 8312	24 2305	37 1475	24	24	22	0
34	34 12	12 4537	12 4537	31 8312	24 2341	37 1503	04	712	186	0

MAXIMUM DEPTH OF CAST = 34 50M

## 1. THE BIN AVERAGE DATA SHEET

START DATE = 1961-05-17 POSIT. NO. 40 45 128 22 40 32  
 END DATE = 1961-05-17 POSIT. NO. 40 45 128 22 40 32  
 BIN SIZE = 1.0M DEPTHS TOP = 1.0M BOTTOM = 39.0M SURFACE PHT = 1.00000

BIN NO	DEAR #	FAST-T DEG-C	ACCU-R-T DEG-C	BAL PPF	SIGMA-T G/CNS**3	COND MM/CM	SPC MM/SEC	NO. OF A	POLARISATION INDEX	BLD
1	1 552	12 2000	12 2000	31 0703	24 9985	36 7540	***	0	0	0
2	1 552	11 7127	11 7127	32 0844	24 3923	36 7241	***	0	0	0
3	1 553	11 4498	11 4498	32 1787	24 3500	36 5240	***	0	0	0
4	1 553	11 4400	11 4400	32 1916	24 3519	36 5090	***	0	0	0
5	1 553	11 4400	11 4400	32 1761	24 3441	36 5037	***	0	0	0
6	1 553	11 4253	11 4253	32 1988	24 3708	36 5050	***	0	0	0
7	1 553	11 4200	11 4200	32 2044	24 3794	36 5050	***	0	0	0
8	1 553	11 4200	11 4200	32 1978	24 3796	36 5050	***	0	0	0
9	1 553	11 4150	11 4150	32 1942	24 3847	36 5020	***	0	0	0
10	1 553	11 4060	11 4060	32 1992	24 3941	36 5890	***	0	0	0
11	1 554	11 4000	11 4000	32 2040	24 5052	36 5890	***	0	0	0
12	1 554	11 4000	11 4000	32 2050	24 5088	36 5890	***	0	0	0
13	1 554	11 4000	11 4000	32 1952	24 5099	36 5890	***	0	0	0
14	1 554	11 3919	11 3919	32 2058	24 6211	36 5890	***	0	0	0
15	1 554	11 3900	11 3900	32 2030	24 6238	36 5890	***	0	0	0
16	1 555	11 3867	11 3867	32 1930	24 5247	36 5080	***	0	0	0
17	1 555	11 3514	11 3514	32 1958	24 5487	36 5080	***	0	0	0
18	1 555	11 3061	11 3061	32 1972	24 5711	36 5080	***	0	0	0
19	1 555	11 3138	11 3138	32 1951	24 5714	36 5080	***	0	0	0
20	1 555	11 3068	11 3068	32 2144	24 5540	36 5290	***	0	0	0
21	1 555	11 2843	11 2843	32 2214	24 6934	36 5080	***	0	0	0
22	1 555	11 2939	11 2939	32 2127	24 5855	36 5080	***	0	0	0
23	1 555	11 2794	11 2794	32 2249	24 2037	36 5080	***	0	0	0
24	1 555	11 2606	11 2606	32 2239	24 2108	36 4902	***	0	0	0
25	1 557	11 2652	11 2652	32 2169	24 2022	36 4880	***	0	0	0
26	1 555	11 2598	11 2598	32 2212	24 7086	36 4680	***	0	0	0
27	1 555	11 2454	11 2454	32 2334	24 2329	36 4680	***	0	0	0
28	1 555	11 2568	11 2568	32 2212	24 2225	36 4680	***	0	0	0
29	1 555	11 2480	11 2480	32 2215	24 2315	36 4680	***	0	0	0
30	1 555	11 2475	11 2475	32 2303	24 7503	36 4880	***	0	0	0
31	30 55	11 2401	11 2401	32 2363	24 7520	36 4880	***	0	0	0
32	31 55	11 2400	11 2400	32 2361	24 7664	36 4880	***	0	0	0
33	32 54	11 2400	11 2400	32 2356	24 7771	36 4880	***	0	0	0
34	33 55	11 2400	11 2400	32 2352	24 7685	36 4880	***	0	0	0
35	34 57	11 2400	11 2400	32 2348	24 7671	36 4880	***	0	0	0
36	35 59	11 2400	11 2400	32 2344	24 7734	36 4880	***	0	0	0
37	35 56	11 2400	11 2400	32 2340	24 7705	36 4880	***	0	0	0
38	36 54	11 2400	11 2400	32 2336	24 7738	36 4880	***	0	0	0
39	38 55	11 2400	11 2400	32 2331	24 7913	36 4880	***	0	0	0

MAXIMUM DEPTH OF CAST = 39.0M

## DEPTH BIN AVERAGED CTD DATA

START TIME 1981/10/07 POSITION 40 45 05N 29 27 30W  
 STA NO 7 00W NO 28 INST NO 3 TAPE NO 1  
 BIN SIZE = 1 0M DEPTHS TOP = 0 0M, BOTTOM = 100 0M SURFACE PRES = 1 00DBAR

BIN NO	DEBAR M	FAST-T DEG-C	ACCU-T DEG-C	SAL PPT	SIGMA-T G/CM***3	COND MM/CM	VEL M/SEC	NO POINTS/BIN	TOTAL USED	USED
1	46	11 5600	11 5600	32 4030	24 6783	36 2310	****	10	10	0
1	55	11 5600	11 5600	32 4012	24 6820	36 2392	****	9	9	0
1	55	11 5592	11 5592	32 3865	24 6763	36 2143	****	9	9	0
1	55	11 5400	11 5400	32 3992	24 6946	36 2110	****	9	9	0
4	58	11 5400	11 5400	32 3993	24 6980	36 2110	****	9	9	0
5	55	11 5400	11 5400	32 3989	24 7025	36 2110	****	9	9	0
5	55	11 5400	11 5400	32 3985	24 7072	36 2110	****	9	9	0
7	55	11 5400	11 5400	32 3980	24 7126	36 2110	****	9	9	0
8	56	11 5400	11 5400	32 4291	24 7451	36 9432	****	9	9	0
10	58	11 5400	11 5400	32 4474	24 7631	36 9623	****	9	9	0
11	54	11 5400	11 5400	32 4760	24 7890	36 9920	****	9	9	0
11	54	11 5400	11 5400	32 4854	24 8005	37 1020	****	9	9	0
12	54	11 5400	11 5400	32 5218	24 8312	37 1397	****	9	9	0
13	59	11 5400	11 5400	32 5443	24 8551	37 1631	****	9	9	0
14	59	11 5400	11 5400	32 5572	24 8676	37 1747	****	9	9	0
15	56	11 5400	11 5400	32 5710	24 8828	37 1912	****	9	9	0
17	52	11 5400	11 5400	32 5714	24 8905	37 1939	****	9	9	0
17	54	11 5400	11 5400	32 5752	24 8970	37 1963	****	9	9	0
18	56	11 5400	11 5400	32 5899	24 9234	37 1118	****	9	9	0
20	58	11 5400	11 5400	32 5897	24 9156	37 1120	****	9	9	0
21	54	11 5400	11 5400	32 5893	24 9246	37 1120	****	9	9	0
21	51	11 5400	11 5400	32 5889	24 9338	37 1120	****	9	9	0
21	53	11 5400	11 5400	32 5884	24 9354	37 1120	****	9	9	0
21	55	11 5400	11 5400	32 5880	24 9405	37 1120	****	9	9	0
24	57	11 5400	11 5400	32 5883	24 9421	37 1127	****	9	9	0
25	55	11 5400	11 5400	32 5936	24 9504	37 1185	****	9	9	0
26	52	11 5400	11 5400	32 5999	24 9651	37 1253	****	9	9	0
26	54	11 5498	11 5498	32 5973	24 9567	37 1320	****	9	9	0
26	56	11 5418	11 5418	32 6049	24 9810	37 1330	****	9	9	0
29	58	11 5452	11 5452	32 6016	24 9652	37 1530	****	9	9	0
31	55	11 5483	11 5483	32 5984	24 9865	37 1530	****	9	9	0
31	55	11 5515	11 5515	32 5953	24 9892	37 1530	****	9	9	0
32	54	11 5548	11 5548	32 5918	24 9791	37 1530	****	9	9	0
33	55	11 5582	11 5582	32 5939	24 9870	37 1386	****	9	9	0
34	57	11 5600	11 5600	32 6060	24 9951	37 1530	****	9	9	0
36	59	11 5600	11 5600	32 6156	25 0170	37 1530	****	9	9	0
36	56	11 5600	11 5600	32 6052	25 0044	37 1530	****	9	9	0
37	53	11 5600	11 5600	32 6048	25 0098	37 1530	****	9	9	0
39	57	11 5600	11 5600	32 6044	25 0203	37 1530	****	9	9	0
40	57	11 5600	11 5600	32 6039	25 0205	37 1530	****	9	9	0
41	54	11 5600	11 5600	32 6035	25 0242	37 1530	****	9	9	0
41	50	11 5600	11 5600	32 6031	25 0480	37 1530	****	9	9	0
42	52	11 5600	11 5600	32 6027	25 0449	37 1530	****	9	9	0
43	54	11 5600	11 5600	32 6023	25 0276	37 1530	****	9	9	0
44	56	11 5600	11 5600	32 6012	25 0452	37 1530	****	9	9	0
46	53	11 5600	11 5600	32 6015	25 0545	37 1530	****	9	9	0
47	50	11 5600	11 5600	32 6011	25 0512	37 1530	****	9	9	0
48	52	11 5600	11 5600	32 6007	25 0569	37 1530	****	9	9	0

MAXIMUM DEPTH OF CHRT = 13 04M

1992-1993: 2nd year of the ICP-1990

START TIME - 1995-10-21 POSITION - 40 44 32N 039 57 32E  
END TIME - 1995-10-21 POSITION - 40 44 32N 039 57 32E

DEADLINE DEPTH OF CAST = 47.42m

DEPTH BIN AVERAGED CTD DATA

START TIME 1981/11/12 POSITION 44 54 52N 08 27 38W  
STAR NO 7 LOW NO 30 INST NO 3 TYPE NO 1  
BIN SIZE = 1.0M DEPTHS TOW = 0 AM BOTTOM = 130.0M RECORDING DENSITY = 1000BPS

RTN NU	DRAR M	FAST-T DFT-C	ACQUR-T DFG-C	SPL SPF	BTGMA-T G/LINKS	COND MM/CM	SHD AFCED	WT TOTAL	PCTW/T RIN 4112
345	1 46	11 5400	11 5400	32 1254	24 4659	36 6290	黄木木木木	10 10	0 0
	2 44	11 5400	11 5400	32 1250	24 4317	36 5290	黄木木木木	10 10	0 0
	3 55	11 5415	11 5415	32 1017	24 4718	36 6245	黄木木木木	10 10	0 0
	4 57	11 5458	11 5458	32 1068	24 4695	36 6155	黄木木木木	10 10	0 0
356	1 58	11 5498	11 5498	32 4970	24 4874	36 5193	黄木木木木	10 10	0 0
	2 55	11 5535	11 5535	32 3989	24 4659	36 5164	黄木木木木	10 10	0 0
	3 53	11 5524	11 5524	32 1017	24 4702	36 5221	黄木木木木	10 10	0 0
	4 55	11 5500	11 5500	32 1046	24 4811	36 5284	黄木木木木	10 10	0 0
367	3 56	11 5500	11 5500	32 1048	24 4850	36 5280	黄木木木木	10 10	0 0
	4 58	11 5600	11 5600	32 1043	24 4932	36 6290	黄木木木木	10 10	0 0
10	5 58	11 5600	11 5600	32 1040	24 4958	36 6290	黄木木木木	10 10	0 0
11	6 54	11 5600	11 5600	32 1040	24 4958	36 6290	黄木木木木	10 10	0 0
12	7 51	11 5600	11 5600	32 1036	24 4996	36 6270	黄木木木木	10 10	0 0
13	12 35	11 5600	11 5600	32 1031	24 5021	36 6290	黄木木木木	10 10	0 0
14	13 52	11 5600	11 5600	32 1027	24 5022	36 5290	黄木木木木	10 10	0 0
15	14 52	11 5600	11 5600	32 1023	24 5152	36 5280	黄木木木木	10 10	0 0
16	15 58	11 5600	11 5600	32 1019	24 5172	36 5290	黄木木木木	10 10	0 0
17	15 55	11 5600	11 5610	32 1015	24 5204	36 5290	黄木木木木	10 10	0 0
18	15 54	11 5600	11 5600	32 1011	24 5201	36 5290	黄木木木木	10 10	0 0
19	16 53	11 5600	11 5600	32 1007	24 5202	36 5290	黄木木木木	10 10	0 0
20	16 53	11 5600	11 5600	32 1003	24 5203	36 5290	黄木木木木	10 10	0 0
21	20 54	11 5600	11 5600	32 0992	24 5384	36 5290	黄木木木木	10 10	0 0
22	21 51	11 5600	11 5600	32 0995	24 5423	36 5290	黄木木木木	10 10	0 0

nextion DEP TO DE 7.45% = -42.93%

## DEPTH BIN AVERAGED CTD DATA

START TIME 198/1156Z POSITION 40 55 12N 02 35 73W STA NO 7 LOW NO 31 ING VD TAPE NO 32 35 73W BIN SIZE = 1 DM DEPTHS TOP = 0 DM BOTTOM = 100 DM SURFACE PRES = 1000DPaR									
BIN NO	DEBAR M	FAST-T DEG-C	ACCUR-T DEG-C	SAL PPT	SIGMA-T ISOTHERM	COND MM/CM	VEL CM/SEC	NO POINTS/BIN	TOTAL USED
1	46	12 1400	12 1400	31 9986	24 2583	32 0320	***	10	10
2	51	12 1400	12 1400	31 9981	24 2529	32 0320	***	9	9
3	54	12 1400	12 1400	31 9977	24 2581	32 0320	***	9	9
4	58	12 1400	12 1400	31 9973	24 2722	32 0320	***	9	9
5	62	12 1400	12 1400	31 9949	24 2762	32 0320	***	9	9
6	69	12 1400	12 1400	31 9969	24 2835	32 0324	***	9	9
7	70	12 1399	12 1399	31 9991	24 2869	32 0351	***	9	9
8	73	12 1399	12 1399	31 9917	24 2953	32 0381	***	9	9
9	74	12 1399	12 1399	31 9994	24 2974	32 0410	***	9	9
10	75	12 1399	12 1399	31 9944	24 3012	32 0440	***	9	9
11	76	12 1200	12 1200	32 0260	24 3298	32 0469	***	9	9
12	77	12 1200	12 1200	32 0284	24 3419	32 0498	***	9	9
13	78	12 1200	12 1200	32 0291	24 3429	32 0519	***	9	9
14	79	12 1200	12 1200	32 0269	24 3426	32 0410	***	9	9
15	84	12 1200	12 1200	32 0266	24 3489	32 0454	***	9	9
16	85	12 1200	12 1200	32 0194	24 3546	32 0421	***	9	9
17	86	12 1200	12 1200	32 0191	24 3551	32 0431	***	9	9
18	87	12 1200	12 1200	32 0198	24 3553	32 0430	***	9	9
19	88	12 1200	12 1200	32 0094	24 3693	32 0420	***	9	9
20	89	12 1200	12 1200	32 0014	24 3693	32 0420	***	9	9
21	90	12 1384	12 1384	31 9912	24 4513	32 0320	***	9	9
22	91	12 1392	12 1392	31 9939	24 4626	32 0320	***	9	9
23	92	12 1327	12 1327	31 9960	24 4638	32 0320	***	9	9
24	93	12 1298	12 1298	31 9981	24 4757	32 0320	***	9	9
25	94	12 1268	12 1268	32 0003	24 4784	32 0320	***	9	9
26	95	12 1241	12 1241	32 0022	24 4794	32 0320	***	9	9
27	96	12 1212	12 1212	32 0042	24 5013	32 0320	***	9	9
28	97	12 1208	12 1208	32 0049	24 5045	32 0320	***	9	9
29	98	12 1209	12 1209	32 0045	24 5023	32 0320	***	9	9
30	99	12 1200	12 1200	32 0041	24 4135	32 0320	***	9	9
31	30	12 1200	12 1200	32 0032	24 4152	32 0320	***	9	9
32	31	12 1200	12 1200	32 0033	24 4153	32 0320	***	9	9
33	32	12 1200	12 1200	32 0029	24 4152	32 0320	***	9	9
34	33	12 1200	12 1200	32 0025	24 4353	32 0320	***	9	9
35	34	12 1200	12 1200	32 0021	24 4311	32 0320	***	9	9
36	35	12 1200	12 1200	32 0017	24 4309	32 0320	***	9	9
37	36	12 1200	12 1200	32 0013	24 4357	32 0320	***	9	9
38	37	12 1200	12 1200	32 0009	24 4491	32 0320	***	9	9

MAXIMUM DEPTH OF DATA = 38.92M

## DEPTH BIN AVERAGED DATA

BIN NO	DEBAR M	FAST-T DEG-C	ACCUR-T DEG-C	SHFT PPT	SIGHTING G.C.H.M.K.S	COND MM/M	SF %	WIND DIRECTION	PLANE SURFACE	
									MIN	MAX
1	43	12 4800	12 4800	31 8052	24 0453	37 1120	XXXXXX	10	10	0
14	53	12 4800	12 4800	31 8053	24 0503	37 1120	XXXXXX	2	2	0
14	4733	12 4733	12 4733	31 8061	24 0570	37 1120	XXXXXX	2	2	0
4	4400	12 4400	12 4400	31 8183	24 0777	37 1120	XXXXXX	2	2	0
3	4400	12 4400	12 4400	31 8179	24 1819	37 1120	XXXXXX	2	2	0
9	56	12 4400	12 4400	31 8173	24 0879	37 1120	XXXXXX	2	2	0
9	56	12 4400	12 4400	31 808172	24 0913	37 1120	XXXXXX	2	2	0
9	56	12 4400	12 4400	31 80156	24 0955	37 1120	XXXXXX	2	2	0
10	56	12 4400	12 4400	31 8154	24 1013	37 1120	XXXXXX	2	2	0
9	56	12 4400	12 4400	31 8160	24 1146	37 1120	XXXXXX	2	2	0
11	54	12 4400	12 4400	31 8150	24 1113	37 1120	XXXXXX	2	2	0
12	54	12 4400	12 4400	31 8153	24 1232	37 1120	XXXXXX	2	2	0
13	54	12 4386	12 4386	31 8260	24 1232	37 1120	XXXXXX	2	2	0
14	54	12 4374	12 4374	31 8260	24 1341	37 1120	XXXXXX	2	2	0
14	59	12 4200	12 4200	31 8310	24 1445	37 1120	XXXXXX	2	2	0
16	56	12 4200	12 4200	31 8306	24 1502	37 1120	XXXXXX	2	2	0
17	52	12 4200	12 4200	31 8302	24 1534	37 1120	XXXXXX	2	2	0
18	54	12 4200	12 4200	31 8298	24 1597	37 1120	XXXXXX	2	2	0
19	56	12 4200	12 4200	31 8294	24 1694	37 1120	XXXXXX	2	2	0
20	58	12 4200	12 4200	31 8290	24 1665	37 1120	XXXXXX	2	2	0
21	54	12 4200	12 4200	31 8286	24 1249	37 1120	XXXXXX	2	2	0
21	51	12 4200	12 4200	31 8283	24 1269	37 1120	XXXXXX	2	2	0
23	53	12 4200	12 4200	31 8278	24 1271	37 1120	XXXXXX	2	2	0
24	52	12 4200	12 4200	31 8274	24 1850	37 1120	XXXXXX	2	2	0
24	52	12 4200	12 4200	31 8270	24 1928	37 1120	XXXXXX	2	2	0
26	55	12 4198	12 4198	31 8298	24 1897	37 1120	XXXXXX	2	2	0
26	52	12 4174	12 4174	31 8286	24 1974	37 1120	XXXXXX	2	2	0
28	54	12 4146	12 4146	31 8305	24 1965	37 1120	XXXXXX	2	2	0
28	56	12 4115	12 4115	31 8327	24 2289	37 1120	XXXXXX	2	2	0
30	58	12 4086	12 4086	31 8347	24 2144	37 1120	XXXXXX	2	2	0
31	55	12 4058	12 4058	31 8362	24 2423	37 1120	XXXXXX	2	2	0
31	50	12 4030	12 4030	31 8387	24 2303	37 1120	XXXXXX	2	2	0
33	54	12 4003	12 4003	31 8416	24 2486	37 1120	XXXXXX	2	2	0
34	55	12 4000	12 4000	31 8404	24 2473	37 1120	XXXXXX	2	2	0
35	52	12 4000	12 4000	31 8400	24 2554	37 1120	XXXXXX	2	2	0
36	59	12 4000	12 4000	31 8396	24 2556	37 1120	XXXXXX	2	2	0
37	56	12 4000	12 4000	31 8393	24 2618	37 1120	XXXXXX	2	2	0
38	53	12 4000	12 4000	31 8389	24 2649	37 1120	XXXXXX	2	2	0

MAXIMUM DEPTH OF CAST = 38.02M

## SIGHTING SURVEY REPORT FORM

START TIME = 1981-02-27 POS TIDE = 4.2' N DEPTHS = 0.0M TO 33.0M  
 BIN NO = 1-20 DEPTHS TOP = 0.0M BOTTOM = 33.0M SURFACE PRESSURE = 1013.00

BIN NO	DEBAR H	FST-T DEG-C	ACCR-T DEG-C	SMF PPT	SUMMA-T DEGREES	CWD DEGREES	VEL M/S/SEC	WIND DIRECTION	PINT OF SURF
1	46	13 2600	13 2600	31 2075	14 7413	32 0150	XXXXXX	14	16
2	1 53	13 2500	13 2500	31 2071	13 7407	32 0150	XXXXXX	14	16
3	20 53	13 2600	13 2600	31 2062	13 7411	32 0150	XXXXXX	14	16
4	31 52	13 2500	13 2500	31 2063	13 7402	32 0151	XXXXXX	14	16
5	4 58	13 2500	13 2500	31 2059	13 7403	32 0150	XXXXXX	14	16
6	5 55	13 2600	13 2600	31 2055	13 7403	32 0150	XXXXXX	14	16
7	39 53	13 2643	13 2643	31 2015	13 7408	32 0150	XXXXXX	14	16
8	39 53	13 2734	13 2734	31 2012	13 7405	32 0150	XXXXXX	14	16
9	8 56	13 2753	13 2753	31 2012	13 7403	32 0150	XXXXXX	14	16
10	9 58	13 2622	13 2622	31 2022	13 7812	32 0150	XXXXXX	14	16
11	10 54	13 2600	13 2600	31 2050	13 7803	32 0150	XXXXXX	14	16
12	11 51	13 2600	13 2600	31 2033	13 7806	32 0150	XXXXXX	14	16
13	12 55	13 2600	13 2600	31 2029	13 7805	32 0150	XXXXXX	14	16
14	13 57	13 2500	13 2500	31 2031	13 7802	32 0150	XXXXXX	14	16
15	14 59	13 2600	13 2600	31 2030	13 7802	32 0150	XXXXXX	14	16
16	15 56	13 2473	13 2473	31 5235	23 3045	32 5120	XXXXXX	14	16
17	16 52	13 2344	13 2344	31 5998	23 3034	32 5050	XXXXXX	14	16
18	17 54	13 2022	13 2022	31 9113	23 3423	32 5120	XXXXXX	14	16
19	18 55	13 1982	13 1982	31 2153	23 3423	32 5120	XXXXXX	14	16
20	19 58	13 1678	13 1678	31 5223	23 3035	32 5120	XXXXXX	14	16
21	20 54	13 1500	13 1600	31 6268	23 3811	32 3580	XXXXXX	3	3

MAXIMUM DEPTH OF CAST = 21.01M

## DEPTH BIN AVERAGED CTD DATA

START TIME = 1981/19527 POSITION 30 32 44N 69 27 12W  
 INSTRUMENT NO = 7 LOW NO 34 INSTRUMENT NO 3 TAPE NO 1  
 BIN SIZE = 1.0M DEPTHS TOP = 0.0M BOTTOM = 100.0M SURFACE PRES = 1.00DBHR

BIN NO	DBAR M	FAST-T DEG-C	ACCU-T DEG-C	SAL PPT	SIGMA-T 1.0M***3	GND MM/CM	VEL CM/SEC	NO POINTS/BIN	TOTAL USED	WIND
1	4.46	12.7000	12.7000	32.5390	24.5697	38.1000	*****	10	10	0
2	4.55	12.7000	12.7000	32.5386	24.5745	38.1000	*****	9	9	0
3	4.55	12.6957	12.6957	32.5484	24.5752	38.1251	*****	9	9	0
4	4.58	12.7244	12.7044	32.5295	24.5997	37.5159	*****	9	9	0
5	4.58	11.9128	11.9128	32.5363	24.5987	37.3964	*****	9	9	0
6	5.55	11.8621	11.8621	32.5738	24.7904	37.3801	*****	9	9	0
7	5.53	11.8456	11.8456	32.5942	24.8147	37.3867	*****	9	9	0
8	5.53	11.7947	11.7947	32.5057	24.8295	37.3540	*****	9	9	0
9	40.00	11.7600	11.7600	32.5153	24.8346	37.3340	*****	9	9	0
10	40.00	11.7600	11.7500	32.5169	24.8531	37.3340	*****	9	9	0
11	10.54	11.7500	11.7500	32.5155	24.8549	37.3340	*****	9	9	0
12	10.51	11.7595	11.7595	32.5154	24.8544	37.3340	*****	9	9	0
13	10.55	11.7421	11.7421	32.5314	24.8738	37.3340	*****	9	9	0
14	10.57	11.7400	11.7400	32.5328	24.8849	37.3340	*****	9	9	0
15	10.59	11.7400	11.7400	32.5324	24.8934	37.3340	*****	9	9	0
16	15.56	11.7400	11.7400	32.6320	24.9009	37.3340	*****	9	9	0
17	10.52	11.7400	11.7400	32.6310	24.9080	37.3340	*****	9	9	0
18	10.54	11.7400	11.7400	32.6310	24.9174	37.3340	*****	9	9	0
19	10.56	11.7400	11.7400	32.6308	24.9198	37.3340	*****	9	9	0
20	10.58	11.7400	11.7400	32.6304	24.9096	37.3340	*****	9	9	0
21	20.54	11.7362	11.7362	32.6333	24.9232	37.3340	*****	9	9	0
22	21.51	11.7200	11.7200	32.6471	24.9404	37.3340	*****	9	9	0
23	22.53	11.7200	11.7200	32.6462	24.9436	37.3340	*****	9	9	0
24	23.55	11.7200	11.7200	32.6463	24.9427	37.3340	*****	9	9	0
25	24.57	11.7200	11.7200	32.6459	24.9650	37.3340	*****	9	9	0
26	25.55	11.7200	11.7200	32.6455	24.9680	37.3340	*****	9	9	0
27	26.56	11.7200	11.7200	32.6451	24.9638	37.3340	*****	9	9	0
28	26.54	11.7200	11.7200	32.6447	24.9638	37.3340	*****	9	9	0
29	26.56	11.7200	11.7200	32.6443	24.9638	37.3340	*****	9	9	0
30	26.58	11.7200	11.7200	32.6438	24.9754	37.3340	*****	9	9	0
31	30.56	11.7200	11.7200	32.6454	24.9839	37.3340	*****	9	9	0
32	31.59	11.7155	11.7155	32.6470	24.9858	37.3340	*****	9	9	0
33	32.54	11.7000	11.7000	32.6602	25.0143	37.3340	*****	9	9	0
34	33.55	11.6889	11.6889	32.6695	25.0253	37.3340	*****	9	9	0
35	34.57	11.6800	11.6800	32.6720	25.0363	37.3340	*****	9	9	0
36	35.59	11.6800	11.6800	32.6760	25.0360	37.3340	*****	9	9	0
37	36.56	11.6743	11.6743	32.6812	25.0394	37.3340	*****	9	9	0
38	36.53	11.6597	11.6597	32.6935	25.0866	37.3340	*****	9	9	0
39	36.53	11.6442	11.6442	32.7085	25.0865	37.3340	*****	9	9	0
40	36.57	11.6465	11.6465	32.7045	25.0894	37.3340	*****	9	9	0
41	40.54	11.6392	11.6392	32.7125	25.0858	37.3340	*****	9	9	0
42	41.50	11.6200	11.6200	32.7271	25.1043	37.3340	*****	9	9	0
43	42.52	11.6200	11.6200	32.7262	25.1080	37.3340	*****	9	9	0
44	43.54	11.6154	11.6154	32.7303	25.1315	37.3340	*****	9	9	0
45	44.56	11.6009	11.6009	32.7427	25.1383	37.3340	*****	9	9	0
46	45.53	11.5843	11.5843	32.7570	25.1761	37.3340	*****	9	9	0
47	45.50	11.5650	11.5650	32.7710	25.1954	37.3340	*****	9	9	0
48	42.50	11.5600	11.5600	32.7761	25.2169	37.3340	*****	9	9	0
49	48.54	11.5600	11.5600	32.7791	25.1851	37.3340	*****	9	9	0
50	49.56	11.5600	11.5600	32.7641	25.2249	37.3340	*****	9	9	0
51	50.58	11.5600	11.5600	32.7583	25.1493	37.3155	*****	9	9	0
52	51.56	11.5600	11.5600	32.7565	25.2181	37.3140	*****	9	9	0
53	52.53	11.5600	11.5600	32.7561	25.3033	37.3140	*****	9	9	0

MAXIMUM DEPTH OF CAST = 53.044

## DEPTH BIN AVERAGED CTD DATA

BIN NO	DEAR M	FAST-T DEG-C	ACCUR-T DEG-C	SAL PPT	SIGMA-T G/CM**3	COND MM/CM	VEL M/S	W TOTAL	PROF TS BIN	
									TOP	BOT
1	68	18 3671	18 3671	33 2182	23 8520	44 1583	79	8	1	0
2	69 439	18 3482	18 3482	33 2181	23 8522	44 1379	57	57	1	0
3	69 535	18 3113	18 3113	33 2124	23 8218	44 1943	21	145	1	0
4	6 31	18 3136	18 3136	33 2125	23 8208	44 0051	11	293	1	0
5	6 31	18 1686	18 1686	33 2202	23 9202	43 9694	18	171	1	0
6	7 29	17 9591	17 9591	33 1980	23 9576	43 7446	58	52	1	0
7	8 37	17 5119	17 5119	33 2045	24 0722	43 3245	48	27	1	0
8	9 23	17 3882	17 3882	33 2355	24 1352	43 2371	34	93	1	0
9	10 30	17 2559	17 2559	33 2320	24 1669	43 1241	36	48	1	0
10	11 36	17 0790	17 0790	33 2358	24 2179	43 9487	81	29	1	0
11	12 28	16 7028	16 7028	33 2394	24 2669	42 7852	49	53	1	0
12	13 32	16 4169	16 4169	33 2157	24 3632	43 2967	52	45	1	0
13	14 34	15 5325	15 5325	33 2271	24 5899	43 2154	34	93	1	0
14	15 29	15 2688	15 2688	33 2844	24 6836	41 2882	50	53	1	0
15	16 34	15 1911	15 1911	33 3000	24 7391	41 1473	22	59	1	0
16	17 27	14 8809	14 8809	33 3080	24 7982	40 2497	43	74	1	0
17	18 31	14 2653	14 2653	33 3013	24 8424	40 7399	57	57	1	0
18	19 27	14 4357	14 4358	33 3358	24 8937	40 8186	34	45	1	0
19	20 27	13 3233	13 3233	33 3269	24 9569	39 9293	34	45	1	0
20	21 29	13 0197	13 0197	33 2480	25 1570	39 1481	30	43	1	0
21	22 33	13 4446	12 4446	33 4032	25 3940	38 7084	55	56	1	0
22	23 36	13 2404	12 2404	33 4460	25 4212	38 5340	31	45	1	0
23	24 38	12 0835	12 0835	33 4793	25 5314	38 5235	39	45	1	0
24	25 38	12 0228	12 0228	33 5129	25 5718	38 5025	35	35	1	0
25	26 30	11 9980	11 9980	33 5205	25 5871	38 4878	34	58	1	0
26	27 28	11 9515	11 9515	33 5276	25 6071	38 4524	46	59	1	0
27	28 30	11 9370	11 9370	33 5271	25 6259	38 4455	50	53	1	0
28	29 33	11 8960	11 8960	33 5404	25 6356	38 4151	59	43	1	0
29	30 31	11 8520	11 8520	33 5497	25 5929	38 3843	43	50	1	0
30	31 25	11 3208	11 3208	33 5608	25 6795	38 3672	38	45	1	0
31	32 28	11 7864	11 7864	33 6664	25 6949	38 3415	69	59	1	0
32	33 33	11 7440	11 7440	33 6794	25 7163	38 3160	49	49	1	0
33	34 34	11 7119	11 7119	33 5885	25 7338	38 2962	63	63	1	0
34	35 31	11 6337	11 6337	33 5994	25 7641	38 2352	46	57	1	0
35	36 32	11 5685	11 5685	33 6178	25 7909	38 1940	49	49	1	0
36	37 30	11 5380	11 5380	33 6355	25 8193	38 1842	55	56	1	0
37	38 31	11 5242	11 5242	33 6415	25 8293	38 1780	57	54	1	0
38	39 34	11 5205	11 5205	33 6455	25 8394	38 1791	50	52	1	0
39	40 31	11 5165	11 5165	33 6535	25 8483	38 1840	46	49	1	0
40	41 32	11 5153	11 5153	33 6573	25 8583	38 1872	56	48	1	0
41	42 34	11 5153	11 5153	33 6574	25 8654	38 1872	58	52	1	0
42	43 32	11 5150	11 5150	33 6638	25 8725	38 1943	36	45	1	0
43	44 35	11 5149	11 5149	33 6646	25 8787	38 1955	20	45	1	0
44	45 31	11 5146	11 5146	33 6696	25 8849	38 2007	31	39	1	0
45	46 36	11 5134	11 5134	33 6776	25 9016	38 2081	53	49	1	0
46	47 26	11 5139	11 5139	33 6777	25 9007	38 2092	28	111	1	0
47	48 29	11 5141	11 5141	33 6779	25 9146	38 2100	29	59	1	0
48	49 32	11 5140	11 5140	33 6728	25 9226	38 2102	91	34	1	0
49	50 38	11 5144	11 5144	33 6791	25 9103	38 2113	21	52	1	0
50	51 27	11 5145	11 5145	33 6780	25 9250	38 2112	29	107	1	0
51	52 26	11 5144	11 5144	33 6772	25 9294	38 2117	72	43	1	0
52	53 34	11 5145	11 5145	33 6725	25 9331	38 2121	77	40	1	0
53	54 34	11 5149	11 5149	33 6726	25 9400	38 2130	52	45	1	0
54	55 37	11 5149	11 5149	33 6721	25 9462	38 2129	72	83	1	0
55	56 39	11 5149	11 5149	33 6775	25 9486	38 2138	22	103	1	0
56	57 33	11 5151	11 5151	33 6722	25 9521	38 2140	15	208	1	0
57	58 33	11 5149	11 5149	33 6772	25 9541	38 2143	28	256	1	0
58	59 31	11 5150	11 5150	33 6721	25 9528	38 2146	45	550	1	0
59	60 39	11 5141	11 5141	33 6759	25 9580	38 2141	11	127	1	0
60	61 38	11 5142	11 5142	33 6770	25 9643	38 2148	10	314	1	0

MAXIMUM DEPTH OF CAST = 61 910

## DEPTH, BIN AVERAGED CTD DATA

START TIME = 2001-14-17 POSITION 49 56 30N 027 21W  
 START NO = 1 DEPTHS NO = 2 SURFACE PRESSURE = 1000 mb  
 BIN SIZE = 1 KM DEPTHS TOP = 0M BOTTOM = 1000m SURFACE PRESSURE = 1000mb

BIN NO	DEBAR M	FAST-T DEG-C	ACCU-R-T DEG-C	SAL PPT	STOMA-T GUTTMER	COND MM/M	VFL METER	NO THERM	POLYMER BIN USED	WLD
1	85	14 1544	14 1544	32 2842	34 3074	38 9110	45	50	444	50
2	68	13 0052	13 0052	33 0035	34 3076	38 4666	49	50	444	50
3	68	13 2185	13 2185	33 1185	34 3076	38 0961	49	50	444	50
4	65	13 2344	13 2344	33 1888	34 3076	38 7932	49	50	444	50
5	74	12 4199	12 4199	33 1835	35 1422	38 5145	50	50	444	50
6	76	12 2121	12 2121	33 2326	35 2250	38 3795	41	50	444	50
7	78	12 0956	12 0956	33 2399	35 2575	38 3802	45	50	444	50
8	74	11 9145	11 9145	33 2650	35 3168	38 1400	49	50	444	50
9	75	11 8985	11 8985	33 3878	35 3430	38 1491	49	50	444	50
10	67	11 8469	11 8469	33 2803	35 3504	38 0944	50	50	444	50
11	72	11 2902	11 2902	33 2888	35 3702	38 0519	85	50	444	50
12	72	11 2796	11 2796	33 3840	38 3840	38 0498	49	50	444	50
13	75	11 2738	11 2738	33 2990	35 3940	38 0473	49	50	444	50
14	71	11 2675	11 2675	33 3020	35 3993	38 0453	49	50	444	50
15	75	11 7698	11 7698	33 3021	35 4055	38 0480	49	50	444	50
16	69	11 7629	11 7629	33 3057	35 4149	38 0457	85	50	444	50
17	73	11 7555	11 7555	33 3040	35 4232	38 0436	49	50	444	50
18	78	11 2544	11 2544	33 3108	35 4323	38 0440	49	50	444	50
19	63	11 7407	11 7407	33 3186	35 4415	38 0398	49	50	444	50
20	70	11 7351	11 7351	33 3224	35 4538	38 0391	49	50	444	50
21	73	11 2329	11 2329	33 3240	35 4552	38 0391	85	50	444	50
22	73	11 2316	11 2316	33 3248	35 4635	38 0391	49	50	444	50
23	69	11 2303	11 2303	33 3263	35 4688	38 0399	49	50	444	50
24	70	11 2242	11 2242	33 3315	35 4876	38 0401	49	50	444	50
25	73	11 7227	11 7227	33 3331	35 4880	38 0412	49	50	444	50
26	73	11 7195	11 7195	33 3362	35 4939	38 0413	85	50	444	50
27	68	11 7192	11 7192	33 3367	35 5017	38 0429	49	50	444	50
28	74	11 7129	11 7129	33 3382	35 5026	38 0427	49	50	444	50
29	72	11 7120	11 7120	33 3390	35 5123	38 0431	49	50	444	50
30	78	11 7088	11 7088	33 3491	35 5271	38 0465	51	50	444	50
31	58	11 7080	11 7080	33 3493	35 5350	38 0462	50	50	444	50
32	67	11 7080	11 7080	33 3493	35 5432	38 0462	50	50	444	50
33	59	11 7026	11 7026	33 3499	35 5388	38 0474	50	50	444	50
34	72	11 7079	11 7079	33 3497	35 5489	38 0479	50	50	444	50
35	76	11 7084	11 7084	33 3497	35 5519	38 0489	50	50	444	50
36	68	11 7073	11 7073	33 3515	35 5561	38 0501	49	50	444	50
37	67	11 7069	11 7069	33 3515	35 5615	38 0501	49	50	444	50
38	68	11 7022	11 7022	33 3513	35 5686	38 0506	49	50	444	50
39	75	11 7021	11 7021	33 3519	35 5763	38 0512	49	50	444	50
40	73	11 7076	11 7076	33 3514	35 5743	38 0520	49	50	444	50
41	71	11 7072	11 7072	33 3520	35 5761	38 0520	49	50	444	50
42	71	11 2065	11 2065	33 3531	35 5875	38 0535	49	50	444	50
43	71	11 2059	11 2059	33 3537	35 5942	38 0540	49	50	444	50
44	78	11 2053	11 2053	33 3546	35 5995	38 0547	49	50	444	50
45	73	11 2049	11 2049	33 3547	35 5975	38 0550	49	50	444	50
46	75	11 2058	11 2058	33 3538	35 6031	38 0554	49	50	444	50
47	95	11 2072	11 2072	33 3523	35 6100	38 0555	49	50	444	50
48	71	11 2021	11 2021	33 3522	35 6196	38 0552	49	50	444	50
49	73	11 2081	11 2081	33 3541	35 6259	38 0553	49	50	444	50
50	72	11 2051	11 2051	33 3560	35 6212	38 0582	50	50	444	50
51	97	11 2035	11 2035	33 3588	35 6363	38 0604	49	50	444	50
52	72	11 2030	11 2030	33 3594	35 6369	38 0611	49	50	444	50
53	59	11 2022	11 2022	33 3607	35 6478	38 0621	49	50	444	50
54	71	11 2023	11 2023	33 3602	35 6456	38 0625	49	50	444	50
55	75	11 2015	11 2015	33 3623	35 6539	38 0639	49	50	444	50
56	73	11 2034	11 2034	33 3603	35 6672	38 0641	49	50	444	50
57	72	11 2026	11 2026	33 3619	35 6744	38 0645	49	50	444	50
58	74	11 2021	11 2021	33 3618	35 6756	38 0651	49	50	444	50
59	75	11 2020	11 2020	33 3623	35 6634	38 0660	49	50	444	50
60	75	11 2035	11 2035	33 3610	35 6286	38 0666	49	50	444	50
61	72	11 2025	11 2025	33 3612	35 6201	38 0662	49	50	444	50
62	78	11 6986	11 6986	33 3652	35 6203	38 0672	49	50	444	50
63	69	11 6983	11 6983	33 3658	35 6238	38 0680	49	50	444	50
64	72	11 6983	11 6983	33 3653	35 7105	38 0679	49	50	444	50
65	70	11 6986	11 6986	33 3660	35 7152	38 0692	49	50	444	50
66	78	11 6978	11 6978	33 3652	35 7212	38 0692	49	50	444	50
67	75	11 6989	11 6989	33 3652	35 7202	38 0693	49	50	444	50
68	75	11 6991	11 6991	33 3653	35 7261	38 0703	49	50	444	50
69	70	11 6988	11 6988	33 3653	35 7286	38 0705	49	50	444	50

MAXIMUM DEPTH OF CAST = 67 210

## DEPTH BIN AVERAGED LOG DATA

BIN NO	DEEP	POSITION		BIN SIZE = 1.0M DEPTHS	TOP = 0M BOTTOM = 114.0M	SURFACE PRESSURE = 1013HAR			
		40	45						
1	29	11	441.0	11	441.0	32	1734	24	3393
2	52	11	335.0	11	335.0	32	1744	24	3404
3	43	11	272.0	11	272.0	32	1754	24	3414
4	58	11	225.0	11	225.0	32	1764	24	3424
5	31	11	173.0	11	173.0	32	1774	24	3434
6	19	11	125.0	11	125.0	32	1784	24	3444
7	28	11	89.0	11	89.0	32	1794	24	3454
8	53	11	49.0	11	49.0	32	1804	24	3464
9	32	11	37.0	11	37.0	32	1814	24	3474
10	19	11	27.0	11	27.0	32	1824	24	3484
11	23	11	22.0	11	22.0	32	1834	24	3494
12	43	11	18.0	11	18.0	32	1844	24	3504
13	58	11	15.0	11	15.0	32	1854	24	3514
14	44	11	14.0	11	14.0	32	1864	24	3524
15	73	11	32.0	11	32.0	32	1874	24	3534
16	43	11	30.0	11	30.0	32	1884	24	3544
17	58	11	29.0	11	29.0	32	1894	24	3554
18	44	11	28.0	11	28.0	32	1904	24	3564
19	79	11	741.7	11	741.7	32	1914	24	3574
20	53	11	741.7	11	741.7	32	1924	24	3584
21	29	11	739.4	11	739.4	32	1934	24	3594
22	31	11	739.4	11	739.4	32	1944	24	3604
23	52	11	739.4	11	739.4	32	1954	24	3614
24	19	11	738.8	11	738.8	32	1964	24	3624
25	23	11	738.8	11	738.8	32	1974	24	3634
26	44	11	737.4	11	737.4	32	1984	24	3644
27	53	11	737.4	11	737.4	32	1994	24	3654
28	31	11	737.4	11	737.4	32	2004	24	3664
29	52	11	737.4	11	737.4	32	2014	24	3674
30	19	11	736.7	11	736.7	32	2024	24	3684
31	23	11	736.7	11	736.7	32	2034	24	3694
32	44	11	735.2	11	735.2	32	2044	24	3704
33	53	11	735.2	11	735.2	32	2054	24	3714
34	31	11	734.2	11	734.2	32	2064	24	3724
35	52	11	734.2	11	734.2	32	2074	24	3734
36	19	11	733.2	11	733.2	32	2084	24	3744
37	23	11	732.1	11	732.1	32	2094	24	3754
38	44	11	732.1	11	732.1	32	2104	24	3764
39	53	11	732.1	11	732.1	32	2114	24	3774
40	31	11	731.1	11	731.1	32	2124	24	3784
41	52	11	731.1	11	731.1	32	2134	24	3794
42	19	11	730.1	11	730.1	32	2144	24	3804
43	23	11	729.1	11	729.1	32	2154	24	3814
44	44	11	728.1	11	728.1	32	2164	24	3824
45	53	11	728.1	11	728.1	32	2174	24	3834
46	31	11	727.1	11	727.1	32	2184	24	3844
47	52	11	727.1	11	727.1	32	2194	24	3854
48	19	11	726.1	11	726.1	32	2204	24	3864
49	23	11	725.1	11	725.1	32	2214	24	3874
50	44	11	724.1	11	724.1	32	2224	24	3884
51	53	11	724.1	11	724.1	32	2234	24	3894
52	31	11	723.1	11	723.1	32	2244	24	3904
53	52	11	723.1	11	723.1	32	2254	24	3914
54	19	11	722.1	11	722.1	32	2264	24	3924
55	23	11	721.1	11	721.1	32	2274	24	3934
56	44	11	720.1	11	720.1	32	2284	24	3944
57	53	11	719.1	11	719.1	32	2294	24	3954
58	31	11	718.1	11	718.1	32	2304	24	3964
59	52	11	717.1	11	717.1	32	2314	24	3974
60	19	11	716.1	11	716.1	32	2324	24	3984
61	23	11	715.1	11	715.1	32	2334	24	3994
62	44	11	714.1	11	714.1	32	2344	24	4004
63	53	11	713.1	11	713.1	32	2354	24	4014
64	31	11	712.1	11	712.1	32	2364	24	4024
65	52	11	711.1	11	711.1	32	2374	24	4034
66	19	11	710.1	11	710.1	32	2384	24	4044
67	23	11	709.1	11	709.1	32	2394	24	4054
68	44	11	708.1	11	708.1	32	2404	24	4064
69	53	11	707.1	11	707.1	32	2414	24	4074
70	31	11	706.1	11	706.1	32	2424	24	4084
71	52	11	705.1	11	705.1	32	2434	24	4094
72	19	11	704.1	11	704.1	32	2444	24	4104
73	23	11	703.1	11	703.1	32	2454	24	4114
74	44	11	702.1	11	702.1	32	2464	24	4124
75	53	11	701.1	11	701.1	32	2474	24	4134
76	31	11	700.1	11	700.1	32	2484	24	4144
77	52	11	699.1	11	699.1	32	2494	24	4154
78	19	11	698.1	11	698.1	32	2504	24	4164
79	23	11	697.1	11	697.1	32	2514	24	4174
80	44	11	696.1	11	696.1	32	2524	24	4184
81	53	11	695.1	11	695.1	32	2534	24	4194
82	31	11	694.1	11	694.1	32	2544	24	4204
83	52	11	693.1	11	693.1	32	2554	24	4214
84	19	11	692.1	11	692.1	32	2564	24	4224
85	23	11	691.1	11	691.1	32	2574	24	4234
86	44	11	690.1	11	690.1	32	2584	24	4244
87	53	11	689.1	11	689.1	32	2594	24	4254
88	31	11	688.1	11	688.1	32	2604	24	4264
89	52	11	687.1	11	687.1	32	2614	24	4274
90	19	11	686.1	11	686.1	32	2624	24	4284
91	23	11	685.1	11	685.1	32	2634	24	4294
92	44	11	684.1	11	684.1	32	2644	24	4304
93	53	11	683.1	11	683.1	32	2654	24	4314
94	31	11	682.1	11	682.1	32	2664	24	4324
95	52	11	681.1	11	681.1	32	2674	24	4334
96	19	11	680.1	11	680.1	32	2684	24	4344
97	23	11	679.1	11	679.1	32	2694	24	4354
98	44	11	678.1	11	678.1	32	2704	24	4364
99	53	11	677.1	11	677.1	32	2714	24	4374
100	31	11	676.1	11	676.1	32	2724	24	4384
101	52	11	675.1	11	675.1	32	2734	24	4394
102	19	11	674.1	11	674.1	32	2744	24	4404
103	23	11	673.1	11	673.1	32	2754	24	4414
104	44	11	672.1	11	672.1	32	2764	24	4424
105	53	11	671.1	11	671.1	32	2774	24	4434
106	31	11	670.1	11	670.1	32	2784	24	4444
107	52	11	669.1	11	669.1	32	2794	24	4454
108	19	11	668.1	11	668.1	32	2804	24	4464
109	23	11	667.1	11	667.1	32	2814	24	4474
110	44	11	666.1	11	666.1	32	2824	24	4484
111	53	11	665.1	11	665.1	32	2834	24	4494
112	31	11	664.1	11	664.1	32	2844	24	4504
113	52	11	663.1	11	663.1	32	2854	24	4514
114	19	11	662.1	11	662.1	32	2864	24	4524
115	23	11	661.1	11	661.1	32	2874	24	4534
116	44	11	660.1	11	660.1	32	2884	24	4544
117	53	11	659.1	11	659.1	32	2894	24	4554
118	31	11	658.1	11	658.1	32	2904	24	4564
119	52	11	657.1	11	657.1	32	2914	24	4574
120	19	11	656.1	11	656.1	32	2924	24	4584
121	23	11	655.1	11	655.1	32	2934	24	4594
122	44	11	654.1	11	654.1	32	2944	24	4604
123	53	11	653.1	11	653.1	32	2954	24	4614
124	31	11	652.1	11	652.1	32	2964	24	4624
125	52	11	651.1	11	651.1	32	2974	24	4634
126	19	11	650.1	11	650.1	32	2984	24	4644
127	23	11	649.1	11	649.1	32	2994	24	4654
128	44	11	648.1	11	64				

## DEPTH IN METERS

BIN NO	DRDR m	FIRST-T		ACCU-R-T		SPL DEPT	SIGMA-T GAMMA-3	COND PPHM	REF. PPHM	SAL PPHM	P PPHM	T PPHM	D PPHM
		DEG-C	DEG-C	DEG-C	DEG-C								
1	1.26	11 7281	11 7281	32 1256	32 1256	32	4 432.2	36 725.2	34	34	34	34	34
	1.25	11 7074	11 7074	32 1256	32 1256	32	4 432.3	36 725.3	34	34	34	34	34
	1.25	11 7098	11 7098	32 1256	32 1256	32	4 432.4	36 725.4	34	34	34	34	34
	1.28	11 7065	11 7065	32 1256	32 1256	32	4 432.5	36 725.5	34	34	34	34	34
2	5.93	11 7104	11 7104	32 2673	32 2673	32	4 571.3	36 274.1	34	34	34	34	34
	6.24	11 7103	11 7103	32 2673	32 2673	32	4 571.4	36 274.2	34	34	34	34	34
	6.84	11 7168	11 7168	32 2674	32 2674	32	4 580.5	36 275.5	34	34	34	34	34
	7.29	11 7120	11 7120	32 2675	32 2675	32	4 582.6	36 275.6	34	34	34	34	34
3	9.84	11 7112	11 7112	32 2680	32 2680	32	4 591.9	36 275.9	34	34	34	34	34
	10.33	11 7109	11 7109	32 2680	32 2680	32	4 595.4	36 276.9	34	34	34	34	34
	11.25	11 7081	11 7081	32 2680	32 2680	32	4 595.5	36 276.9	34	34	34	34	34
	12.25	11 7002	11 7002	32 2679	32 2679	32	4 598.6	36 276.9	34	34	34	34	34
4	13.88	11 5991	11 5991	32 2684	32 2684	32	4 613.9	36 277.1	34	34	34	34	34
	14.35	11 5907	11 5907	32 2680	32 2680	32	4 616.3	36 277.5	34	34	34	34	34
	15.81	11 7060	11 7060	32 2682	32 2682	32	4 621.0	36 278.4	34	34	34	34	34
	15.88	11 7002	11 7002	32 2685	32 2685	32	4 623.5	36 278.5	34	34	34	34	34
5	17.74	11 7015	11 7015	32 2693	32 2693	32	4 632.8	36 278.8	34	34	34	34	34
	18.78	11 5914	11 5914	32 2690	32 2690	32	4 635.8	36 278.8	34	34	34	34	34
	19.80	11 5872	11 5872	32 2688	32 2688	32	4 640.8	36 278.8	34	34	34	34	34
	20.87	11 5901	11 5901	32 2690	32 2690	32	4 651.1	36 279.8	34	34	34	34	34
6	21.73	11 5858	11 5858	32 2524	32 2524	32	4 655.6	36 279.5	34	34	34	34	34
	22.89	11 5747	11 5747	32 2673	32 2673	32	4 663.3	36 279.9	34	34	34	34	34
	23.86	11 5320	11 5320	32 2648	32 2648	32	4 669.7	36 280.1	34	34	34	34	34
	24.79	11 5453	11 5453	32 2695	32 2695	32	4 678.0	36 280.6	34	34	34	34	34
7	25.79	11 5477	11 5477	32 2685	32 2685	32	4 682.4	36 280.4	34	34	34	34	34
	26.77	11 5394	11 5394	32 2629	32 2629	32	4 689.1	36 272.7	34	34	34	34	34
	27.70	11 5389	11 5389	32 2690	32 2690	32	4 689.7	36 272.7	34	34	34	34	34
	28.80	11 5515	11 5515	32 2712	32 2712	32	4 701.6	36 280.6	34	34	34	34	34
8	29.85	11 5515	11 5515	32 2695	32 2695	32	4 700.2	36 280.6	34	34	34	34	34
	30.79	11 5450	11 5450	32 2564	32 2564	32	4 704.0	36 280.6	34	34	34	34	34
	31.77	11 5394	11 5394	32 2685	32 2685	32	4 718.4	36 272.4	34	34	34	34	34
	32.89	11 5382	11 5382	32 2696	32 2696	32	4 722.2	36 272.8	34	34	34	34	34
9	33.72	11 5424	11 5424	32 2716	32 2716	32	4 724.5	36 280.0	34	34	34	34	34
	34.82	11 5568	11 5568	32 2697	32 2697	32	4 724.0	36 280.4	34	34	34	34	34
	35.83	11 6554	11 6554	32 2696	32 2696	32	4 734.3	36 280.5	34	34	34	34	34
	36.83	11 6554	11 6554	32 2696	32 2696	32	4 734.3	36 280.5	34	34	34	34	34

MAXIMUM DEPTH OF CAST = 36.31M

Mr. T. H. K. is succeeded by Mr. G. M. T. A.

2011-14307 PG 17-12 40 54 28N 00 15 42W  
1000 DEPTHS ISM = 1000 ELEVATION = 1000 fms SURFACE = 1000 fms

MAXIMUM DEPTH OF CAST = 31.21M

## DEPTH BIN AVERAGED CTD DATA

WMO START TIME		2011-1645Z		POSITION		40	59	15N	02	13	TW	
REC NO	CDN NO	INST NO	TYPE NO	DEPTHS	TOP =	DM.	BOTTOM =	-10 DM	SURFACE PRES =	10 DEBAR		
1	1 50	11 7059	11 7059	32	1705	24	1767	36	3234	19	133	0
2	2 50	11 5819	11 5819	32	1626	24	2224	36	3941	19	133	0
3	3 50	11 5934	11 5934	32	1669	24	3002	36	2245	19	133	0
4	4 14	11 5788	11 5788	32	1688	24	5109	36	2095	19	133	0
5	5 15	11 5749	11 5749	32	1728	24	5103	36	2166	19	133	0
6	6 10	11 5328	11 5328	32	1648	24	5259	36	3653	19	133	0
7	7 13	11 4991	11 4991	32	1681	24	5396	36	3391	19	133	0
8	8 09	11 4308	11 4308	32	1590	24	5495	36	3095	19	133	0
9	9 10	11 3828	11 3828	32	1215	24	5103	36	3003	19	133	0
10	10 04	11 3594	11 3594	32	2126	24	5138	36	3013	19	133	0
11	11 08	11 3422	11 3422	32	2260	24	6347	36	5610	22	133	0
12	12 05	11 3342	11 3342	32	2362	24	6475	36	5645	22	133	0
13	13 05	11 3181	11 3181	32	3548	24	6269	36	5608	21	133	0
14	14 13	11 3153	11 3153	32	3701	24	5961	36	5613	21	133	0
15	15 11	11 3033	11 3033	32	3886	24	5102	36	5613	21	133	0
16	16 12	11 2934	11 2934	32	3480	24	7579	36	5424	24	133	0
17	17 13	11 2941	11 2941	32	3523	24	7779	36	5256	24	133	0
18	18 05	11 3005	11 3005	32	3769	24	7939	36	5296	24	133	0
19	19 13	11 3063	11 3063	32	3970	24	8119	36	5442	29	133	0
20	20 13	11 3109	11 3109	32	4130	24	8250	36	7165	29	133	0
21	21 07	11 3150	11 3150	32	4310	24	8363	36	7393	35	133	0
22	22 07	11 3182	11 3182	32	4282	24	8475	36	7497	35	133	0
23	23 14	11 3213	11 3213	32	4116	24	8609	36	7601	35	133	0
24	24 15	11 3234	11 3234	32	4422	24	8233	36	7241	35	133	0
25	25 09	11 3233	11 3233	32	4420	24	8684	36	7691	35	133	0
26	26 10	11 3268	11 3268	32	4501	24	8936	36	7910	40	133	0
27	27 09	11 3289	11 3289	32	4568	24	8914	36	7901	40	133	0
28	28 17	11 3303	11 3303	32	4564	24	8960	36	7914	40	133	0
29	29 07	11 3393	11 3393	32	4626	24	9083	36	8121	40	133	0
30	30 09	11 3407	11 3407	32	4959	24	9782	36	8596	40	133	0
31	31 29	11 3613	11 3613	32	4947	24	9323	36	8594	45	133	0
32	32 02	11 4123	11 4123	32	5588	24	9795	36	9209	45	133	0
33	33 13	11 4267	11 4267	32	6969	25	9113	37	9234	45	133	0
34	34 07	11 4650	11 4650	32	9480	25	9444	37	1102	49	133	0
35	35 19	11 4880	11 4880	32	6892	25	9790	37	1254	42	133	0
36	36 00	11 4918	11 4918	32	2032	25	9942	37	1915	35	133	0
37	37 17	11 4871	11 4871	32	2343	25	1208	37	2143	35	133	0
38	38 09	11 4890	11 4890	32	2346	25	1209	37	2129	35	133	0
39	39 09	11 4863	11 4863	32	2593	25	1551	37	2329	35	133	0
40	40 20	11 4862	11 4862	32	2521	25	1536	37	2377	34	133	0
41	41 11	11 4666	11 4666	32	7701	25	1766	37	2394	49	133	0
42	42 13	11 4493	11 4493	32	2859	25	2013	37	2400	51	133	0
43	43 13	11 4334	11 4334	32	2854	25	2056	37	2355	52	133	0
44	44 12	11 3788	11 3788	32	2909	25	2269	37	1822	45	133	0
45	45 11	11 3456	11 3456	32	2955	25	2462	37	1582	35	133	0
46	46 09	11 3360	11 3360	32	8011	25	3493	37	1546	23	133	0
47	47 23	11 3304	11 3304	32	8005	25	1522	37	1446	23	133	0
48	48 06	11 3139	11 3139	32	8058	25	2539	37	1402	23	133	0
49	49 14	11 3042	11 3042	32	8095	25	2725	37	1360	49	133	0
50	50 19	11 3067	11 3067	32	8049	25	2820	37	1328	49	133	0
51	51 03	11 3051	11 3051	32	3031	25	2074	37	1373	30	133	0
52	52 10	11 3054	11 3054	32	3115	25	2081	37	1401	21	133	0
53	53 05	11 3223	11 3223	32	3159	25	3049	37	1386	35	133	0
54	54 13	11 3220	11 3220	32	3230	25	3126	37	1417	35	133	0
55	55 13	11 3247	11 3247	32	3157	25	3124	37	1417	35	133	0
56	56 11	11 2900	11 2900	32	3261	25	3240	37	1410	35	133	0
57	57 11	11 2903	11 2903	32	3261	25	3240	37	1410	35	133	0
58	58 12	11 2908	11 2908	32	3261	25	3255	37	1412	35	133	0
59	59 12	11 2914	11 2914	32	3123	25	3255	37	1412	35	133	0
60	60 11	11 2908	11 2908	32	3177	25	3802	37	1570	36	133	0
61	61 15	11 2901	11 2901	32	3277	25	3515	37	1460	22	133	0
62	62 11	11 2908	11 2908	32	3191	25	3555	37	1546	21	133	0
63	63 11	11 2913	11 2913	32	3132	25	3555	37	1546	21	133	0
64	64 10	11 2914	11 2914	32	3123	25	3572	37	1546	21	133	0
65	65 12	11 2908	11 2908	32	3177	25	3802	37	1570	36	133	0
66	66 05	11 2900	11 2900	32	4733	25	3722	37	1549	22	133	0
67	67 14	11 2903	11 2903	32	4733	25	3831	37	1548	22	133	0

MAXIMUM DEPTH OF FIRST = 57 MM

## DEPTH BIN AVERAGED CTD DATA

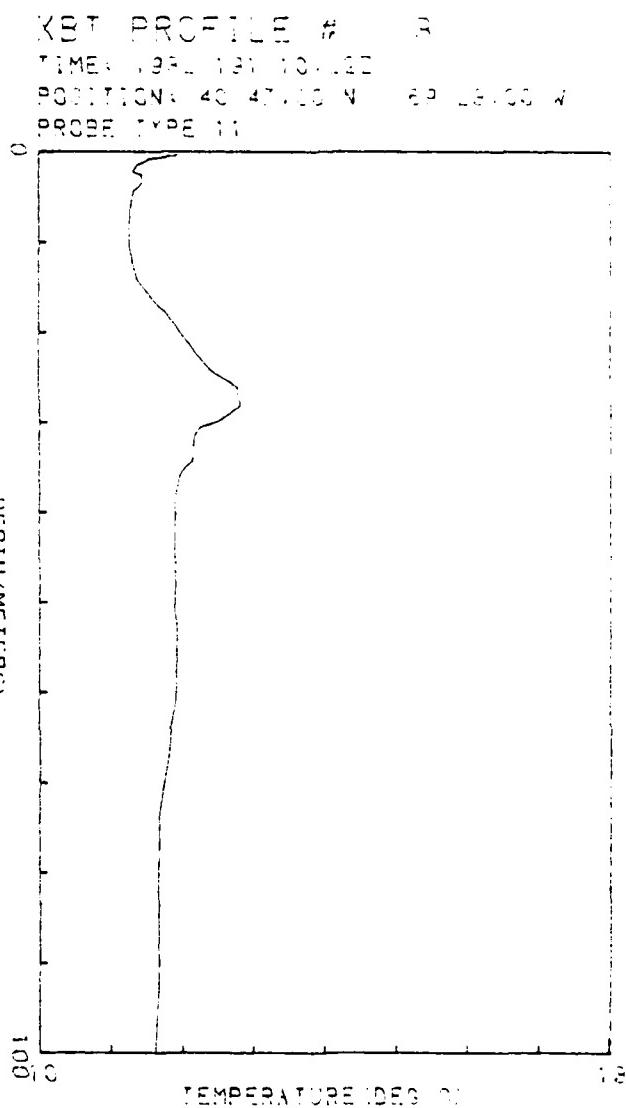
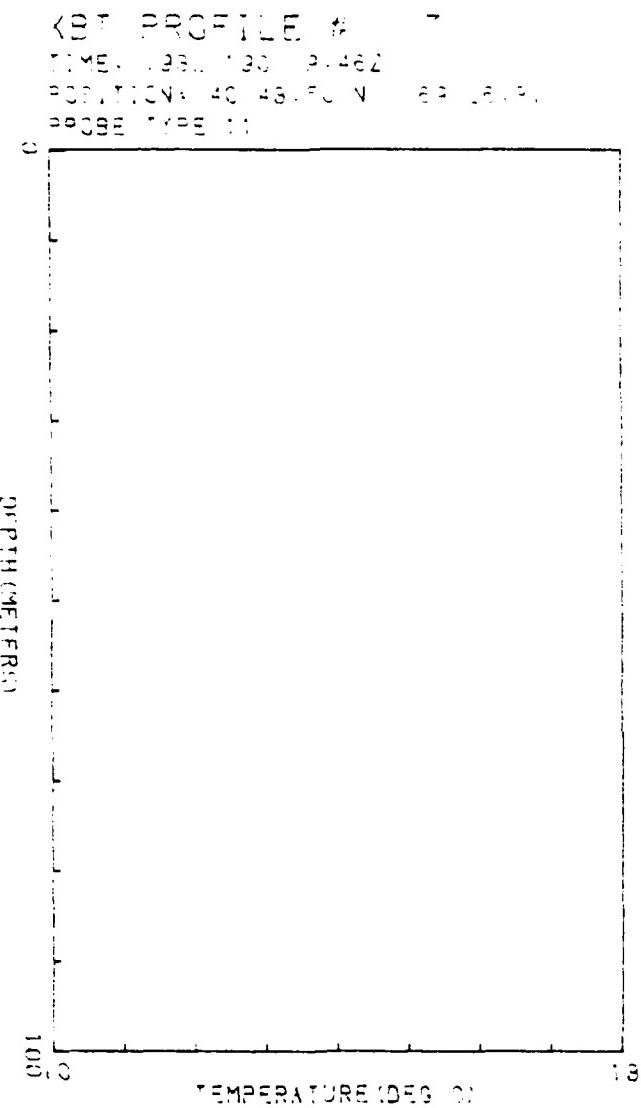
START TIME 2024-01-30Z POSITION 41 ° SUN 59 ° 19' 50W  
 STA NO 2 DEPTH NO 41 INST NO 1 SHAPE N 1  
 BIN SIZE = 1.0M DEPTHS TOP = 0.0M BOTTOM = 100.0M SURFACE PRES = 1.000BAR

BIN NO	DBAR m	FAST-T DEG-C	ACCRU-T DEG-C	SAL PPT	SIGMA-T G/CM**3	COND MM/CM	VEL M/SEC	NO TOTAL	POINTS/BIN USED	WLD
1	0.00	28	10 2631	32 0563	24 5535	35 8710	.58	23	20	
2	0.00	29	10 2493	32 0604	24 5634	35 8634	.34	94	45	
3	0.00	29	10 2465	32 0632	24 5632	35 8629	.47	26	42	
4	0.00	29	10 2489	32 0635	24 5644	35 8601	.59	24	44	
5	0.00	29	10 2514	32 0601	24 5644	35 8601	.59	24	44	
6	0.00	29	10 2531	32 0602	24 5618	35 8681	.94	32	32	
7	0.00	29	10 2594	32 0613	24 5627	35 8630	.33	33	31	
8	0.00	29	10 2653	32 0658	24 5658	35 8609	.40	36	36	
9	0.00	29	10 2530	32 0599	24 5613	35 8671	1.00	36	36	
10	0.00	29	10 2514	32 0599	24 5613	35 8671	1.00	36	36	
11	0.00	30	10 2382	32 0652	24 5117	35 8621	.53	57	48	
12	0.00	30	10 2355	32 0620	24 5120	35 8619	.60	48	48	
13	0.00	30	10 2321	32 0639	24 5154	35 8639	.37	33	30	
14	0.00	30	10 2362	32 0639	24 5154	35 8624	.44	36	36	
15	0.00	30	10 2311	32 0639	24 5151	35 8641	.44	36	36	
16	0.00	30	10 2356	32 0670	24 6327	35 8637	.41	75	75	
17	0.00	30	10 2303	32 0631	24 5426	35 8606	.19	36	36	
18	0.00	30	10 2302	32 0682	24 5499	35 8615	.14	44	44	
19	0.00	30	10 2299	32 0690	24 5554	35 8603	.20	36	36	
20	0.00	30	10 2298	32 0670	24 6586	35 8603	.17	44	44	
21	0.00	30	10 2309	32 0691	24 6637	35 8638	.53	58	54	
22	0.00	30	10 2343	32 0709	24 6736	35 8604	.99	49	49	
23	0.00	30	10 2343	32 0715	24 6755	35 8604	.56	36	36	
24	0.00	30	10 2249	32 0715	24 6848	35 8615	.58	36	36	
25	0.00	30	10 2213	32 0736	24 6904	35 8636	.35	36	36	
26	0.00	30	10 2185	32 0755	24 6936	35 8612	.06	48	43	
27	0.00	30	10 2206	32 0749	24 7024	35 8630	.20	36	35	
28	0.00	30	10 2241	32 0736	24 7052	35 8652	.12	49	49	
29	0.00	30	10 2161	32 0760	24 7088	35 8609	.12	49	49	
30	0.00	30	10 2103	32 0785	24 7197	35 8589	.12	49	49	
31	0.00	30	10 2123	32 0784	24 7219	35 8608	.49	52	52	
32	0.00	30	10 2085	32 0790	24 7316	35 8605	.50	50	49	
33	0.00	30	10 2116	32 0729	24 7354	35 8605	.80	24	24	
34	0.00	30	10 2057	32 0700	24 7447	35 8688	.30	24	24	
35	0.00	30	10 2134	32 0787	24 7433	35 8638	.32	96	66	
36	0.00	30	10 2156	32 0757	24 7431	35 8642	.83	37	37	
37	0.00	30	10 2175	32 0764	24 7559	35 8659	.32	36	35	
38	0.00	30	10 2194	32 0755	24 7594	35 8682	1.00	48	48	
39	0.00	30	10 2140	32 0725	24 7651	35 8647	.24	48	48	
40	0.00	30	10 2106	32 0787	24 7730	35 8633	.96	36	36	
41	0.00	30	10 2111	32 0788	24 7728	35 8646	.23	35	49	
42	0.00	30	10 2070	32 0792	24 7764	35 8621	.05	36	36	
43	0.00	30	10 2043	32 0785	24 7784	35 8634	.12	42	42	
44	0.00	30	10 2115	32 0791	24 7919	35 8665	.96	45	45	
45	0.00	30	10 2072	32 0797	24 7981	35 8639	.24	37	45	
46	0.00	30	10 2140	32 0611	24 7952	35 8624	.93	36	32	
47	0.00	30	10 2087	32 0607	24 8051	35 8612	.43	36	45	

MAXIMUM DEPTH OF CAST = 47.00M

APPENDIX C. PLOTS OF XBT DROPS

All the XBT's were hand digitized from the original charts and then replotted using the standard temperature and depth conversions of the Sippican Corporation, Marion, Mass. Drops 7 to 36 are included.

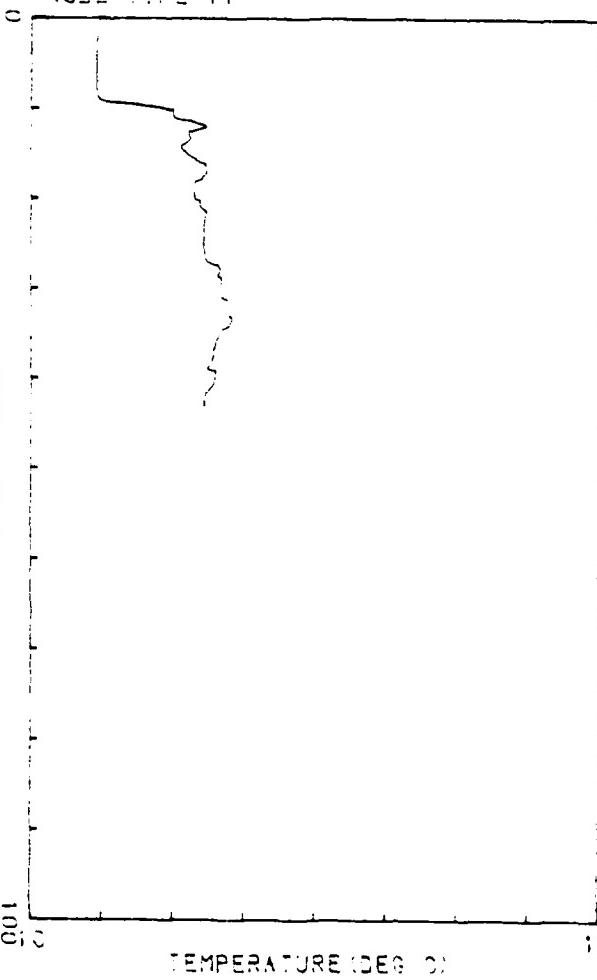


KBT PROFILE # 9

TIME: 1982 192 124.52

POSITION: 40 46.96 N 69 19.04 W

PROBE TYPE 11

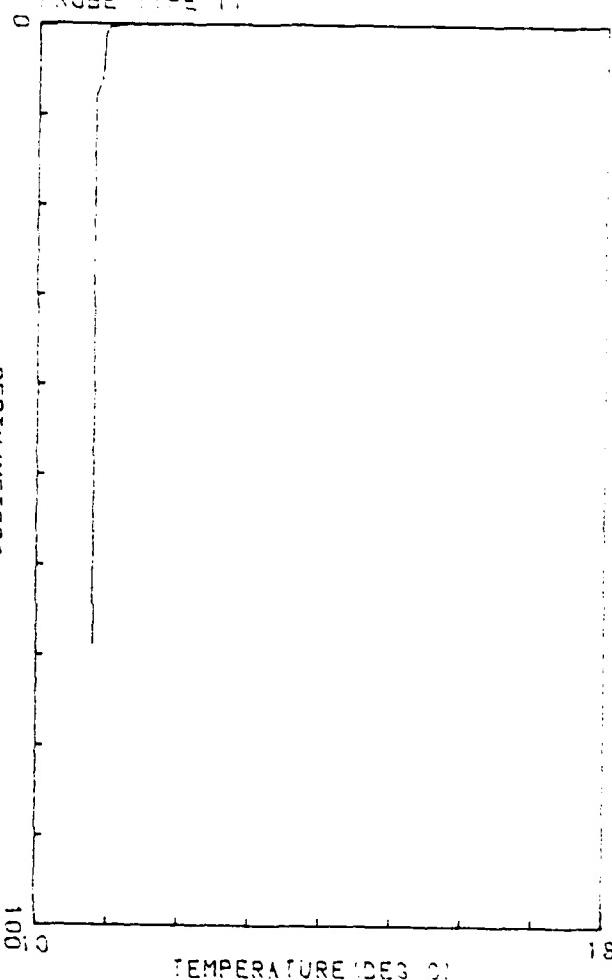


KBT PROFILE # 10

TIME: 1982 192 18.452

POSITION: 40 43.96 N 69 18.94 W

PROBE TYPE 11

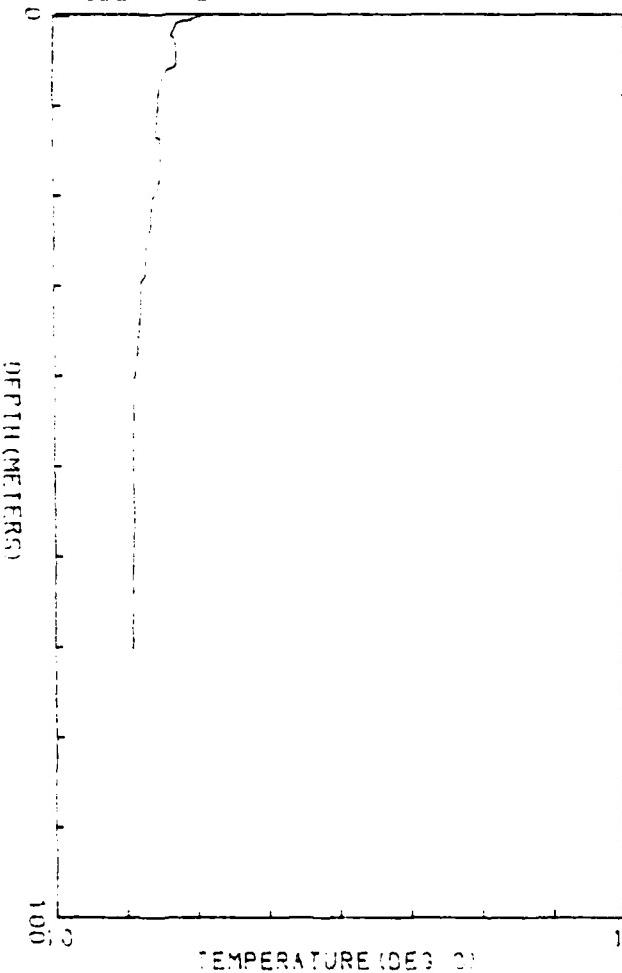


XBT PROFILE # 11

TIME: 1984 103 12:15Z

POSITION: 40 50.00 N 69 16.72 W

PROBE TYPE 11

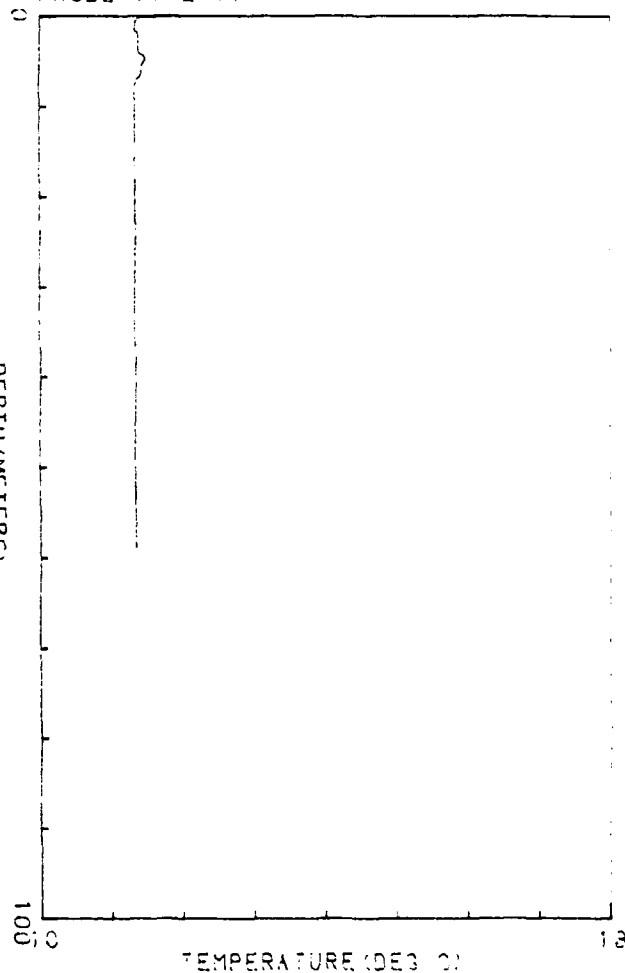


XBT PROFILE # 12

TIME: 1984 104 12:10Z

POSITION: 40 49.91 N 69 34.04 W

PROBE TYPE 11

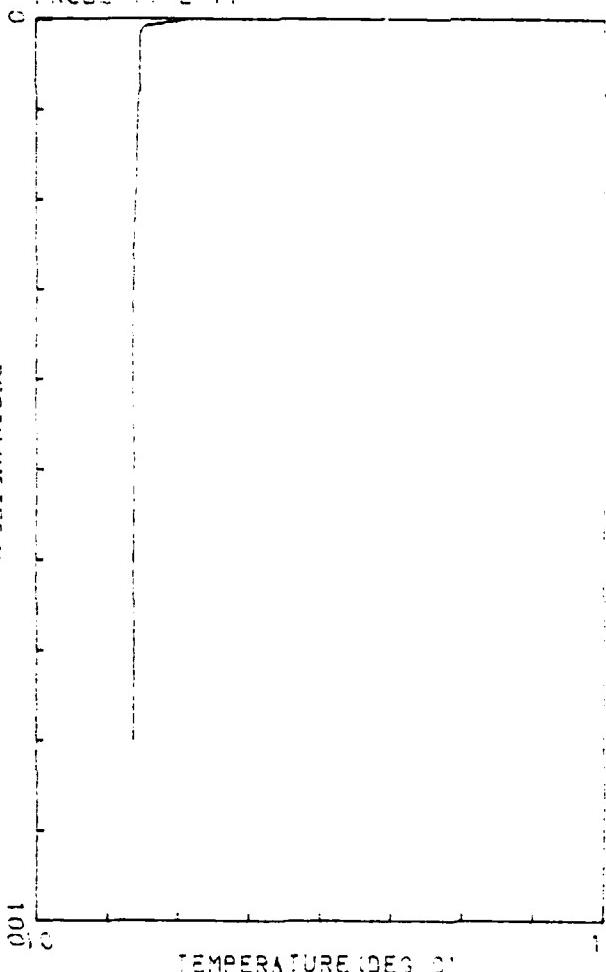


KBT PROFILE # 13

TIME: 1982 135 15:15Z

POSITION: 40 47.42 N 69 21.73 W

PROBE TYPE 11

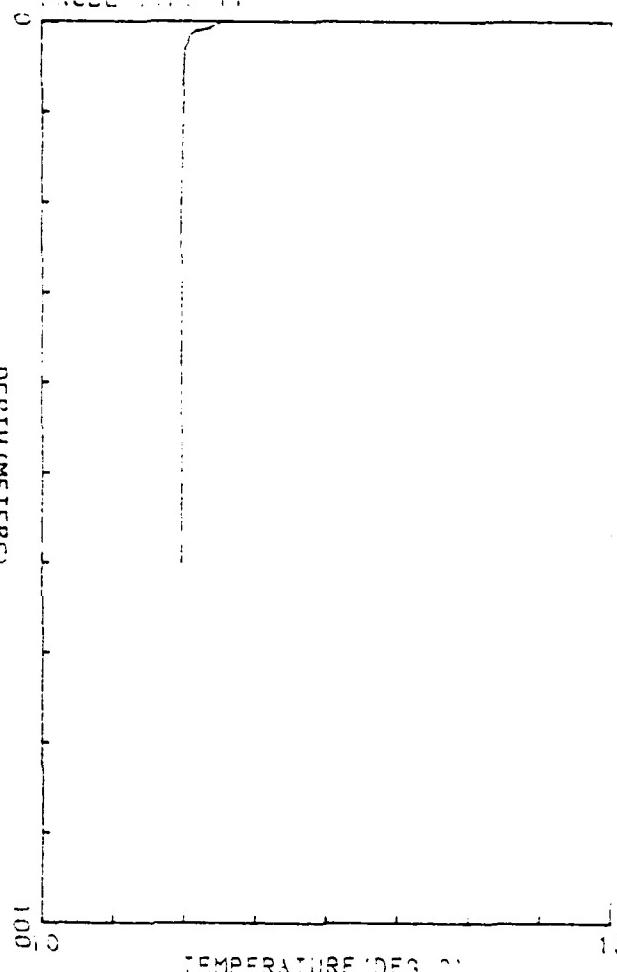


KBT PROFILE # 14

TIME: 1982 138 17:30Z

POSITION: 40 53.71 N 69 30.91 W

PROBE TYPE 11

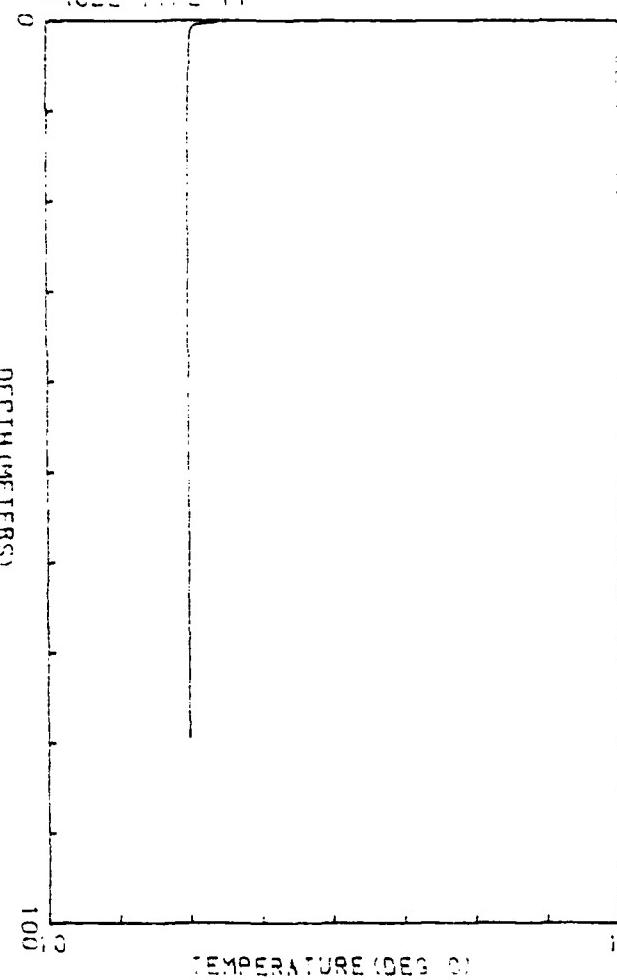


KBT PROFILE # 15

TIME: 1982 138 17:45Z

POSITION: 40 52.50 N 69 30.00 W

PROBE TYPE 11

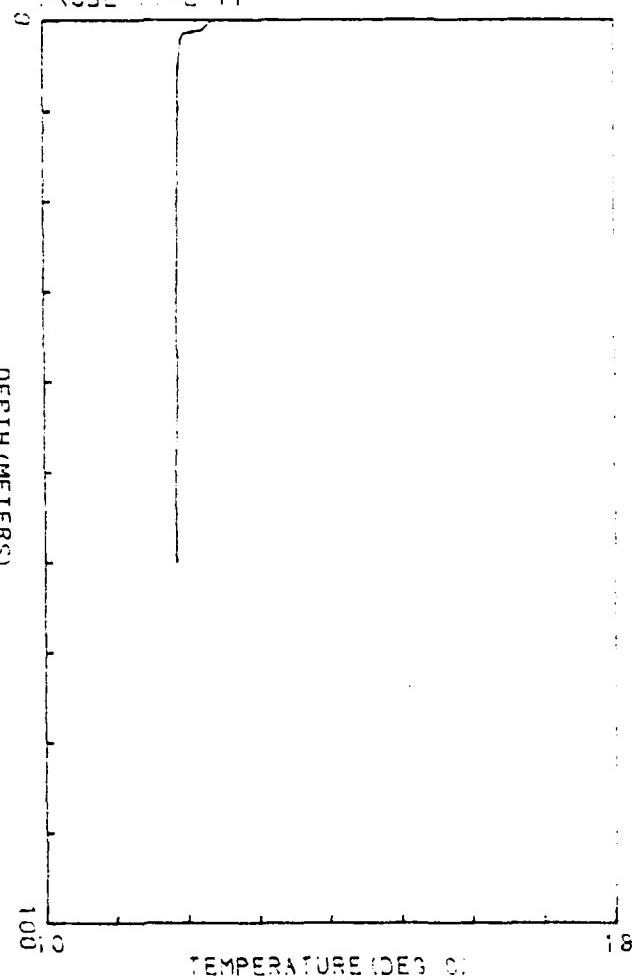


KBT PROFILE # 17

TIME: 1982 138 18:32

POSITION: 40 50.50 N 69 30.00 W

PROBE TYPE 11

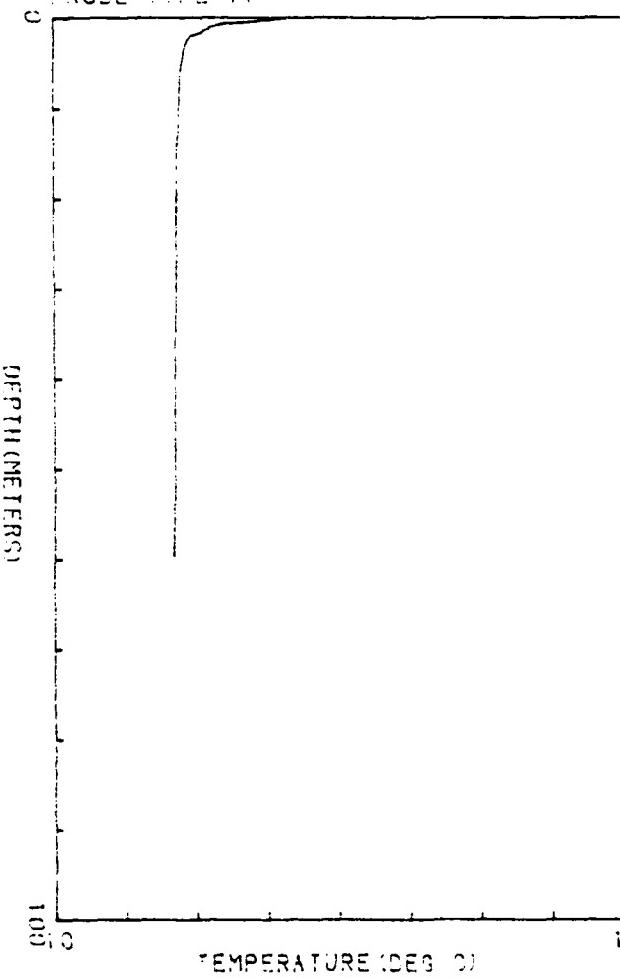


KBT PROFILE # 18

TIME: 1982 198 18:15Z

POSITION: 40 48.10 N 60 30.16 W

PROBE TYPE 11

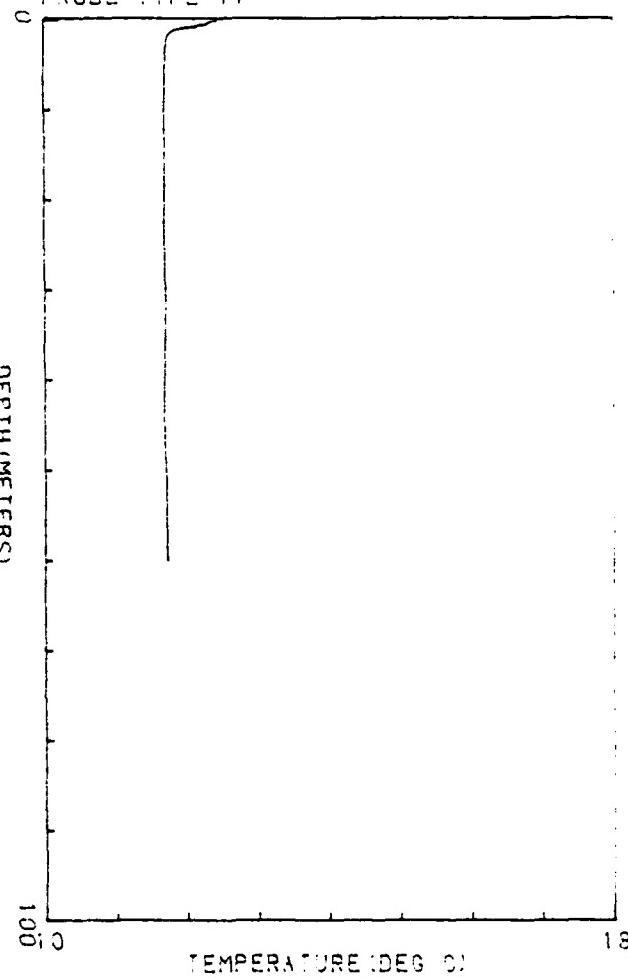


KBT PROFILE # 19

TIME: 1982 198 18:30Z

POSITION: 40 46.50 N 60 29.95 W

PROBE TYPE 11

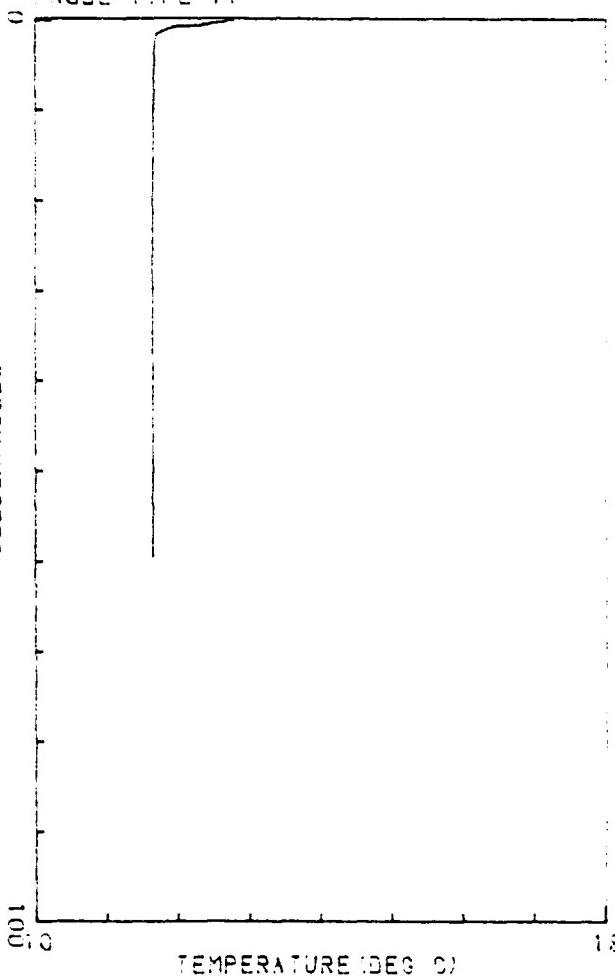


XBT PROFILE # 20

TIME: 1992 199 18:45Z

POSITION: 40 44.80 N 69 29.93 W

PROBE TYPE 11

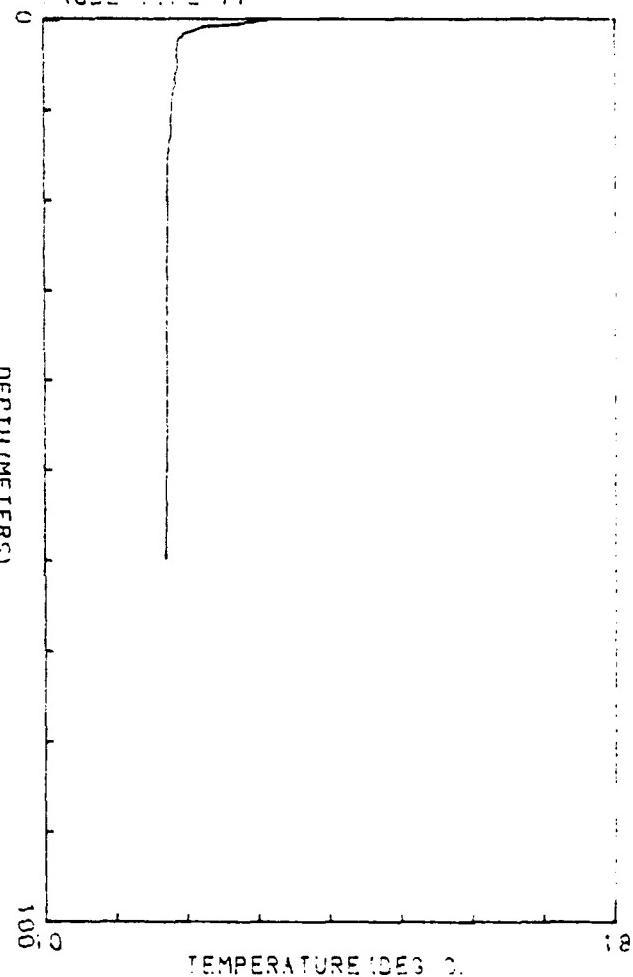


XBT PROFILE # 21

TIME: 1992 199 19:02Z

POSITION: 40 42.80 N 69 30.00 W

PROBE TYPE 11

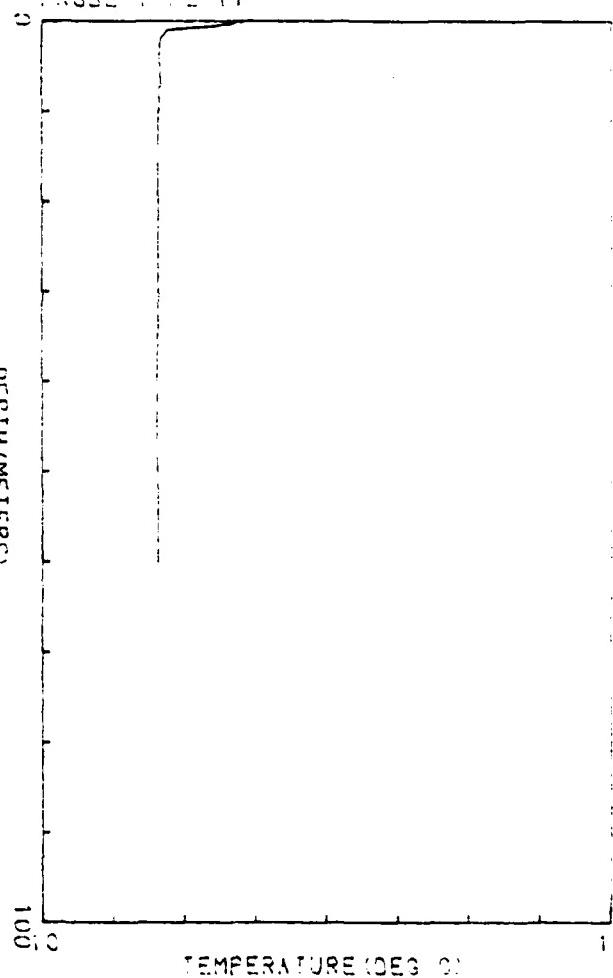


KBT PROFILE # 22

TIME: 1981 198 19:15Z

POSITION: 40 41.00 N 69 19.90 W

PROBE TYPE 11



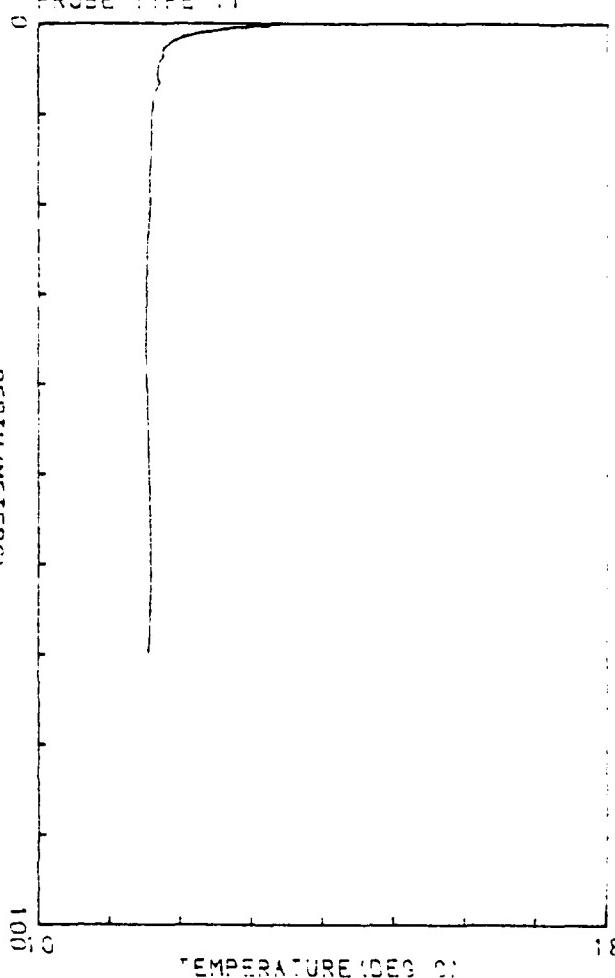
DEPTH (METERS)

KBT PROFILE # 23

TIME: 1981 198 19:30Z

POSITION: 40 40.00 N 69 19.90 W

PROBE TYPE 11

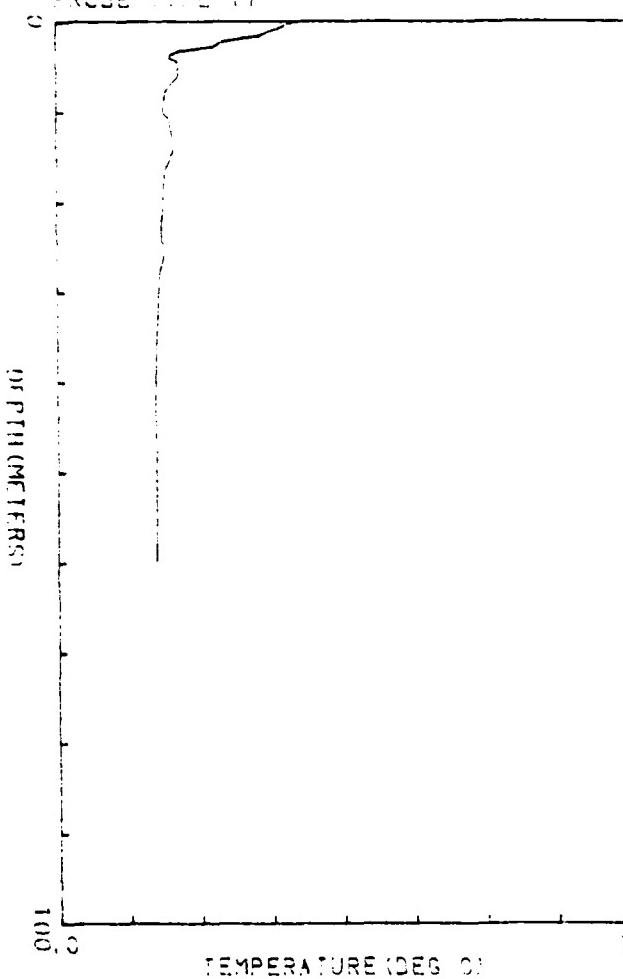


KBT PROFILE # 24

TIME: 1982 138 03:53Z

POSITION: 40 39.70 N 69 29.80 W

PROBE TYPE 11

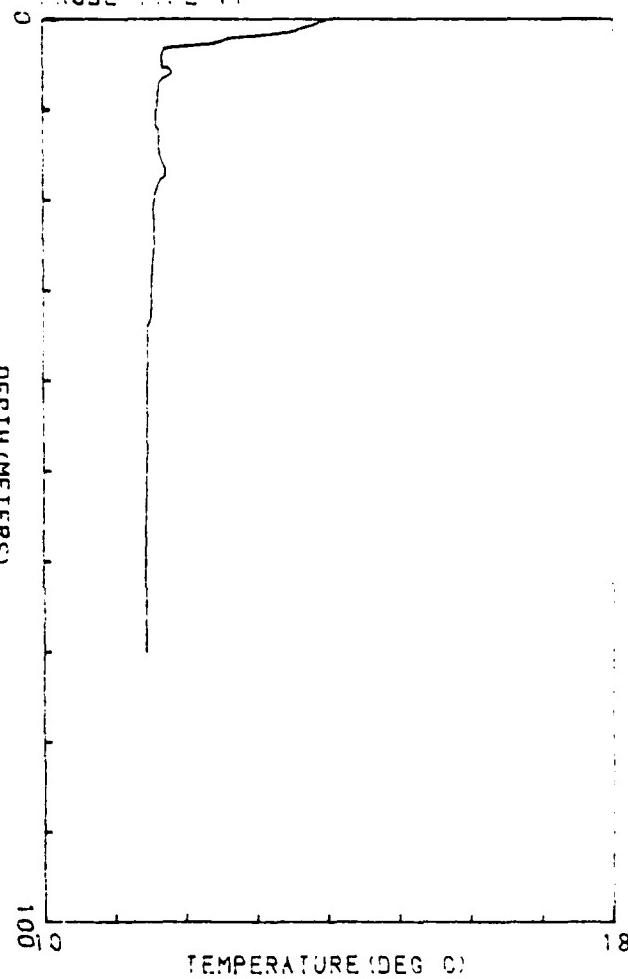


KBT PROFILE # 25

TIME: 1982 139 04:02Z

POSITION: 40 42.40 N 69 29.80 W

PROBE TYPE 11

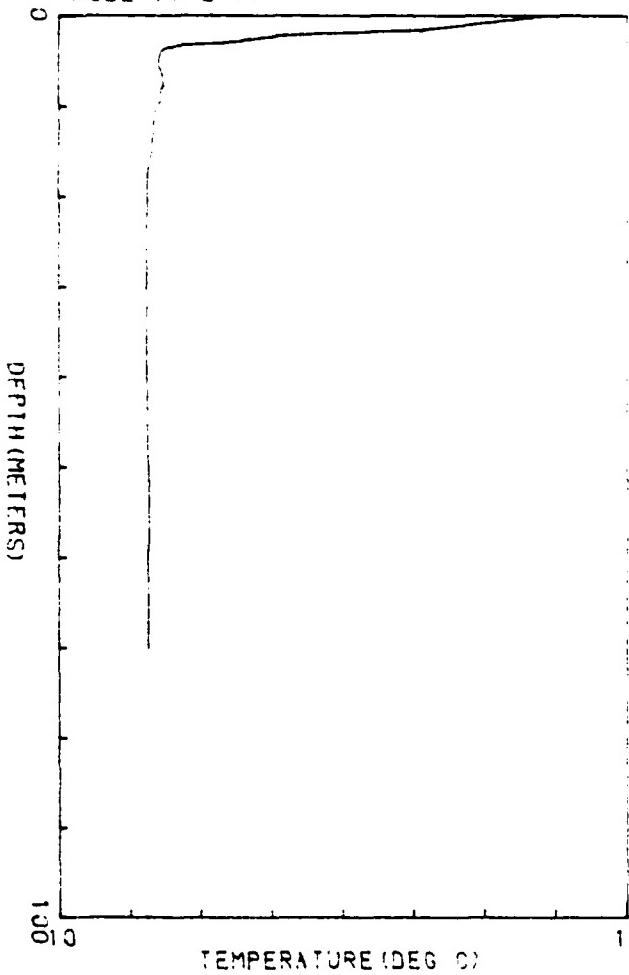


XBT PROFILE # 26

TIME: 1982 199 0:25Z

POSITION: 40 43.30 N 69 29.80 W

PROBE TYPE 11

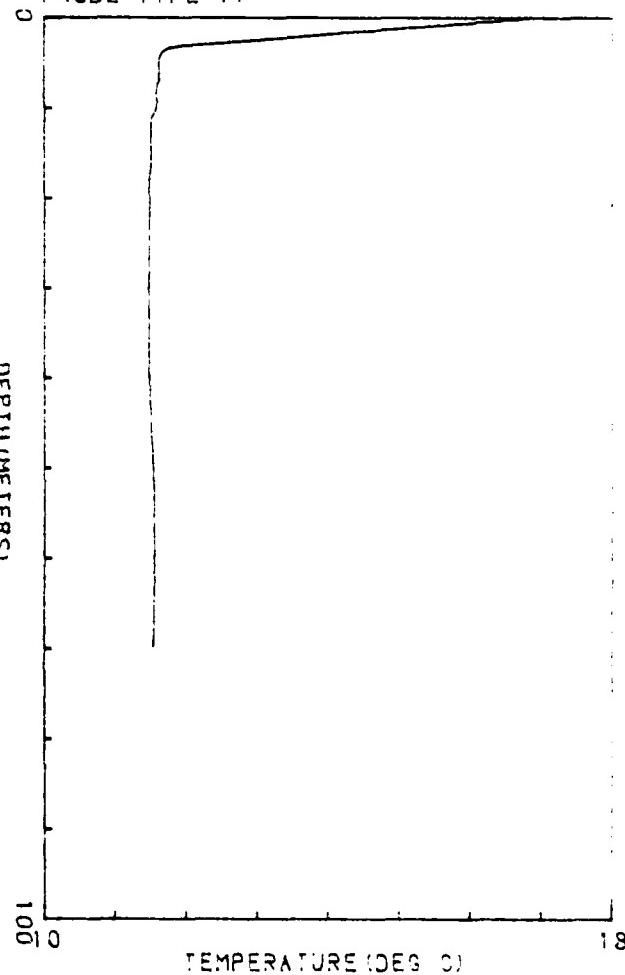


XBT PROFILE # 27

TIME: 1982 199 0:35Z

POSITION: 40 44.90 N 69 29.80 W

PROBE TYPE 11

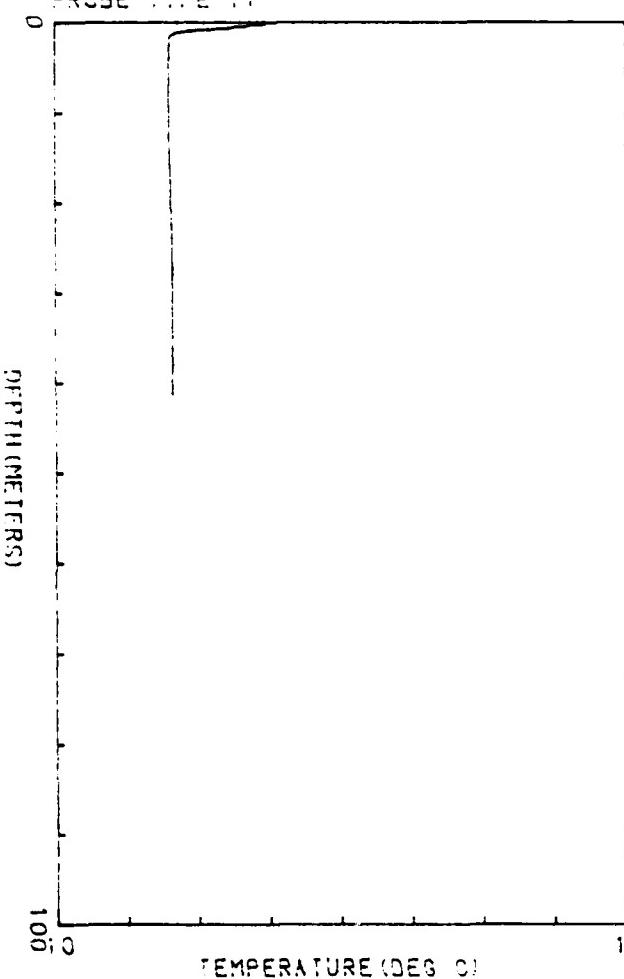


XBT PROFILE # 28

TIME: 199 3 50:02

POSITION: 40 46.60 N 69 29.00 W

PROBE TYPE 11

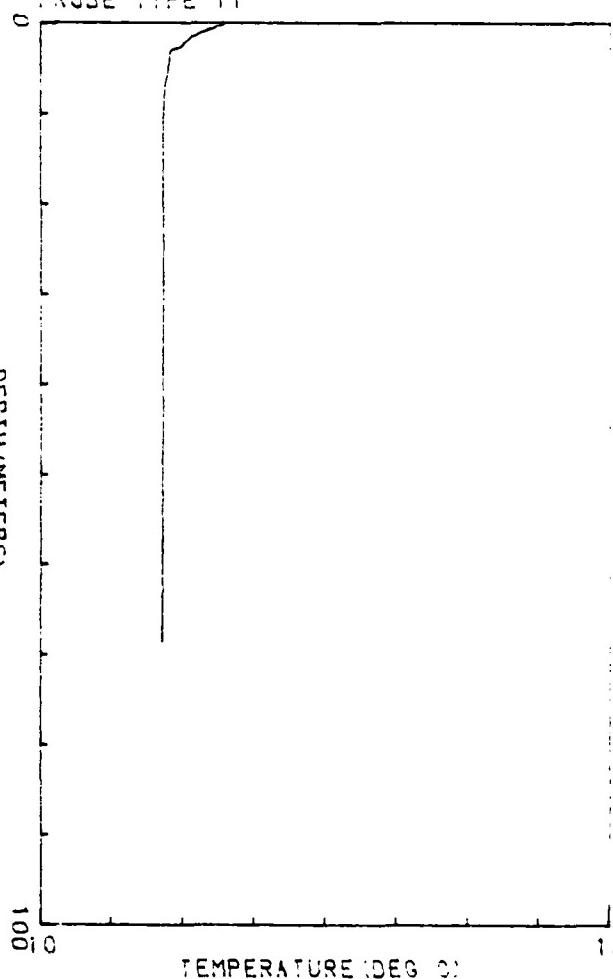


XBT PROFILE # 29

TIME: 199 1 54:02

POSITION: 40 48.30 N 69 29.40 W

PROBE TYPE 11

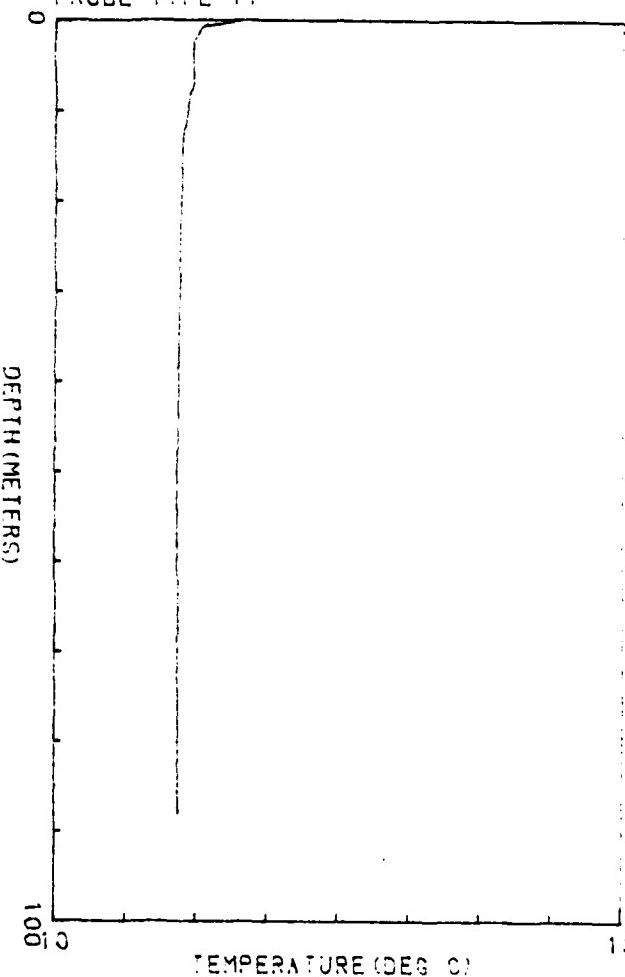


XBT PROFILE # 30

TIME: 199 1 20 02

POSITION: 40 30.14 N 69 29.40 W

PROBE TYPE 11

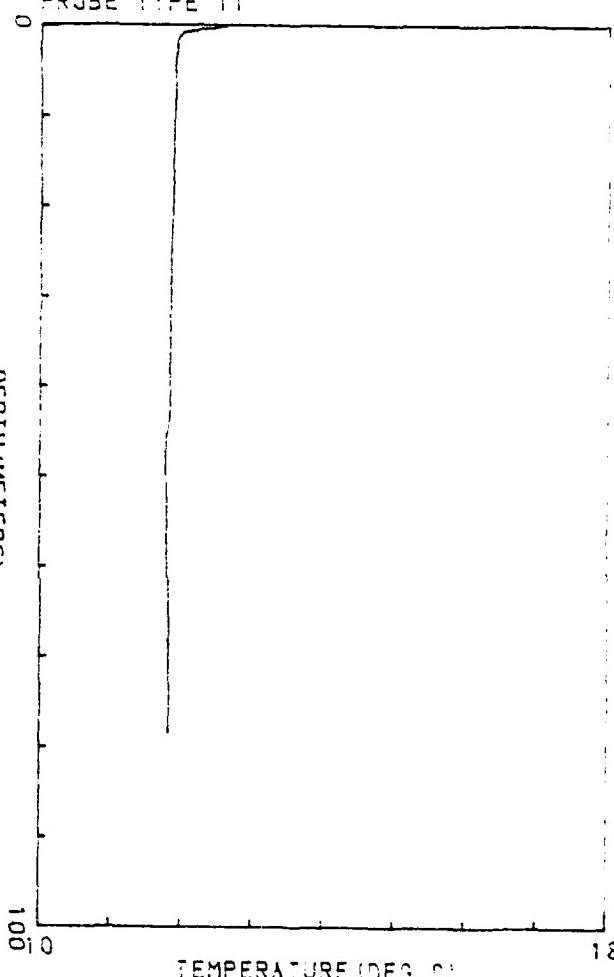


KBT PROFILE # 31

TIME: 199 1 35 02

POSITION: 40 41.90 N 69 29.40 W

PROBE TYPE 11

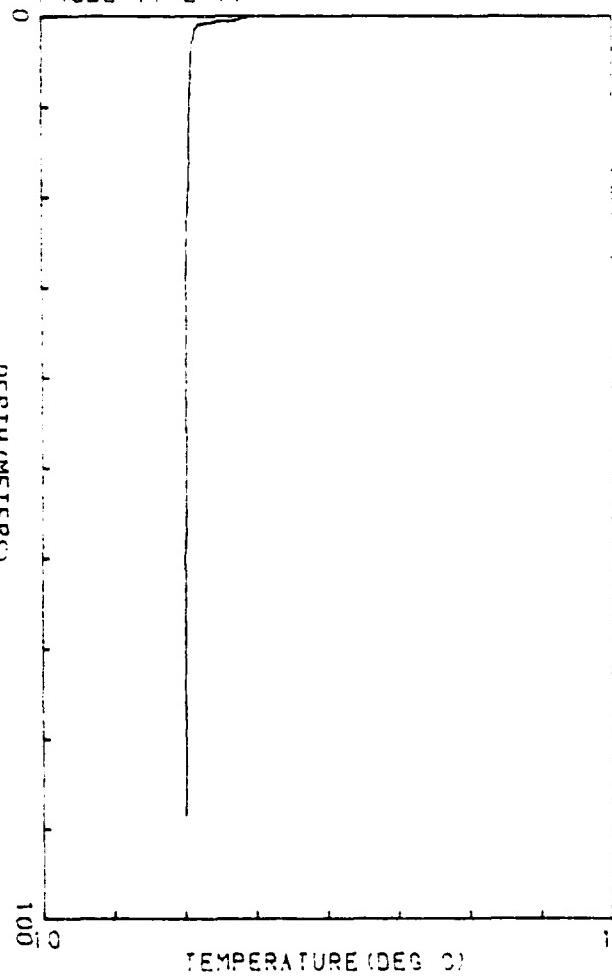


KBT PROFILE # 32

TIME: 199 145:02

POSITION: 40 53.00 N 69 29.50 W

PROBE TYPE 11

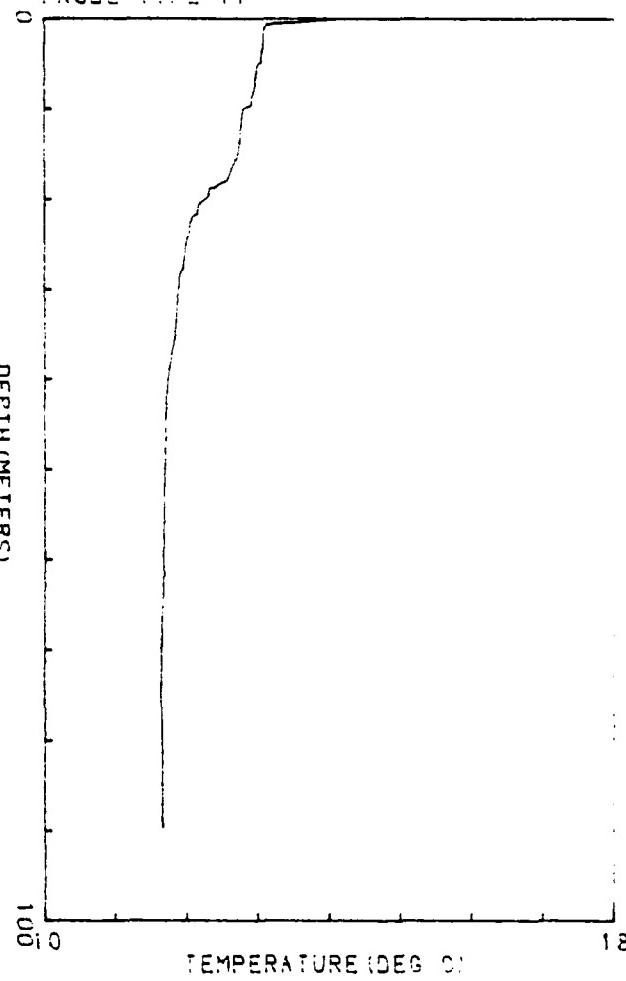


KBT PROFILE # 33

TIME: 199 2025:02

POSITION: 40 53.70 N 69 7.00 W

PROBE TYPE 11

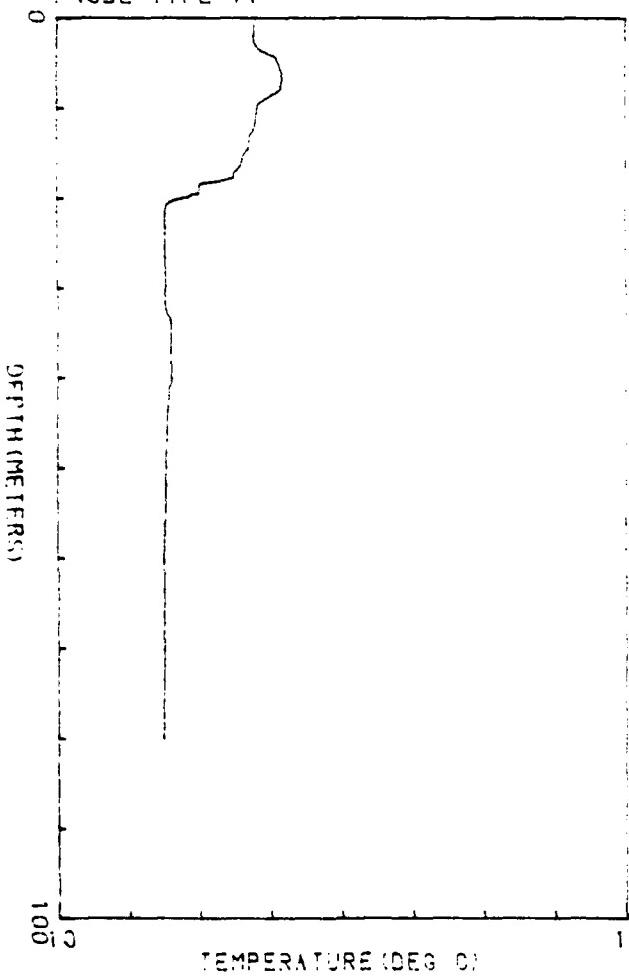


XBT PROFILE # 34

TIME: 200 3 5:02

POSITION: 40 57.10 N 69 6.00 W

PROBE TYPE 11

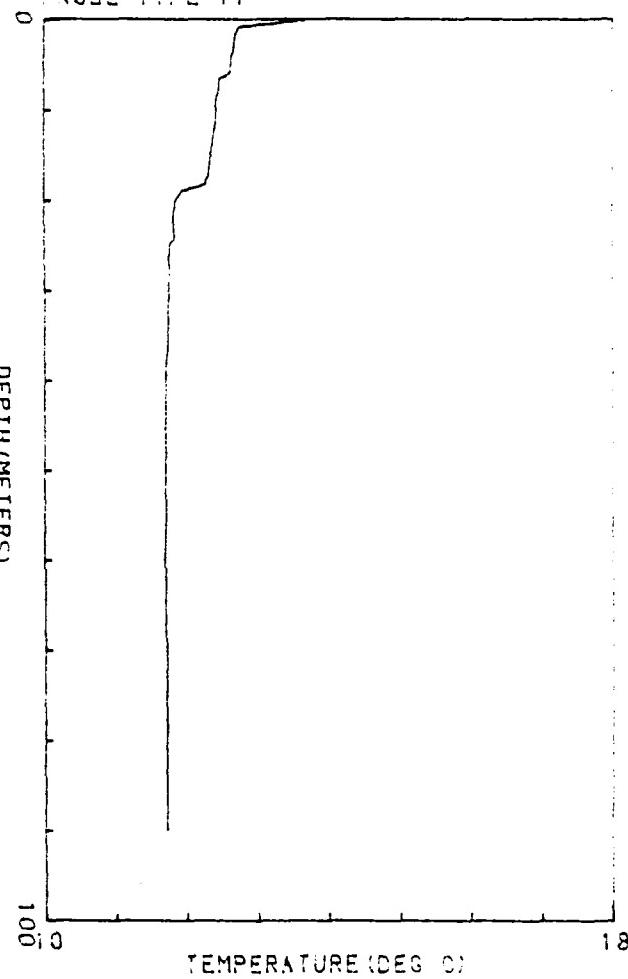


XBT PROFILE # 35

TIME: 200 12 0:02

POSITION: 40 50.50 N 69 11.20 W

PROBE TYPE 11

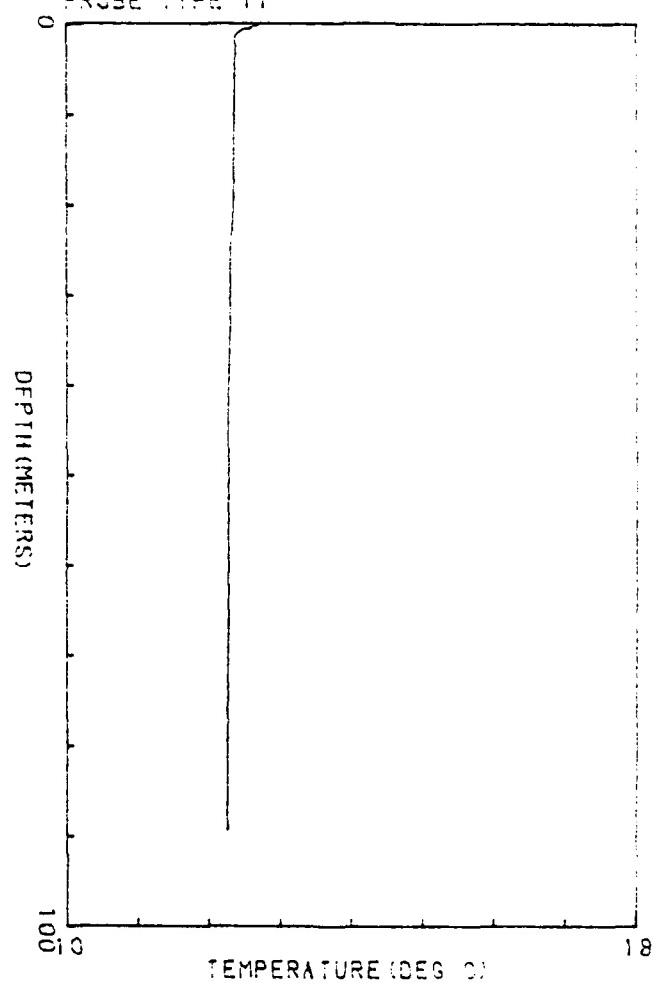


KBT PROFILE # 36

TIME: 202 18 0:02

POSITION: 40 49.10 N 69 33.70 W

PROBE TYPE II



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